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MESSAGE

FROM THE

PRESIDENT OF THE UNITED STATES

TO THE

TWO HOUSES OF CONGRESS

AT THE COMMENCEMENT OF THE

SECOND SESSION OF THE FORTY-NINTH CONGRESS,

WITH THE

REPORTS OF THE HEADS OF DEPARTMENTS

AND

SELECTIONS FROM ACCOMPANYING DOCUMENTS.

EDITED BY

BEN: PERLEY POORE.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1886.

Prepared in accordance with the provisions of the Revised Statutes, approved June 23, 1874.

SEC. 75. The Joint Committee on Public Printing shall appoint a competent person, who shall edit such portion of the documents accompanying the annual reports of the Departments as they may deem suitable for popular distribution, and prepare an alphabetical index thereto.

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SEC. 196. The head of each Department, except the Department of Justice, shall furnish to the Congressional Printer copies of the documents usually accompanying his annual report on or before the first day of November in each year, and a copy of his annual report on or before the third Monday of November in each year.

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SEC. 3728. Of the documents named in this section there shall be printed and bound, in addition to the usual number for Congress, the following number of copies, namely:

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Second. Of the President's message, the annual reports of the Executive Departments, and the abridgment of accompanying documents, unless otherwise ordered by either house, ten thousand copies for the use of the members of the Senate and twenty-five thousand copies for the use of the members of the House of Representatives.

MESSAGE.

To the Congress of the United States:

In discharge of a constitutional duty, and following a well established precedent in the Executive office, I herewith transmit to the Congress at its re-assembling, certain information concerning the state of the Union, together with such recommendations for legislative consideration, as appear necessary and expedient.

Our Government has consistently maintained its relations of friendship toward all other powers, and of neighborly interest toward those whose possessions are contiguous to our own. Few questions have arisen during the past year with other governments, and none of those are beyond the reach of settlement in friendly counsel.

We are as yet without provision for the settlement of claims of citizens of the United States against Chile for injuries during the late war with Peru and Bolivia. The mixed commissions, organized under claims conventions, concluded by the Chilean government with certain European states, have developed an amount of friction which we trust can be avoided in the convention which our representative at Santiago is authorized to negotiate.

The cruel treatment of inoffensive Chinese, has, I regret to say, been repeated in some of the far western states and territories, and acts of violence against those people, beyond the power of the local constituted authorities to prevent, and difficult to punish, are reported even in distant Alaska. Much of this violence can be traced to race prejudice and competition of labor, which cannot, however, justify the oppression of strangers whose safety is guaranteed by our treaty with China equally with the most favored nations.

In opening our vast domain to alien elements, the purpose of our law-givers was to invite assimilation, and not to provide an arena for endless antagonisms. The paramount duty of maintaining public order and defending the interests of our own people, may require the adoption of measures of restriction, but they should not tolerate the oppression of individuals of a special race. I am not without assurance that the government of China, whose friendly disposition towards us I am most happy to recognize, will meet us half way in

devising a comprehensive remedy, by which an effective limitation of Chinese emigration, joined to protection of those Chinese subjects who remain in this country, may be secured.

Legislation is needed to execute the provisions of our Chinese convention of 1880 touching the opium traffic.

While the good will of the Colombian government toward our country is manifest, the situation of American interests on the Isthmus of Panama has at times excited concern, and invited friendly action looking to the performance of the engagements of the two nations concerning the territory embraced in the interoceanic transit. With the subsidence of the Isthmian disturbances, and the erection of the State of Panama into a federal district under the direct government of the constitutional administration at Bogotá, a new order of things has been inaugurated which, although as yet somewhat experimental and affording scope for arbitrary exercise of power by the delegates of the national authority, promises much improvement.

The sympathy between the people of the United States and France, born during our colonial struggle for independence and continuing to-day, has received a fresh impulse in the successful completion and dedication of the colossal statue of "Liberty Enlightening the World" in New York harbor—the gift of Frenchmen to Americans.

A convention between the United States and certain other powers for the protection of submarine cables was signed at Paris on March 14, 1884, and has been duly ratified and proclaimed by this Government. By agreement between the high contracting parties this convention is to go into effect on the 1st of January next, but the legislation required for its execution in the United States has not yet been adopted. I earnestly recommend its enactment.

Cases have continued to occur in Germany giving rise to much correspondence in relation to the privilege of sojourn of our naturalized citizens of German origin revisiting the land of their birth, yet I am happy to state that our relations with that country have lost none of their accustomed cordiality.

The claims for interest upon the amount of tonnage dues illegally exacted from certain German steamship lines were favorably reported in both Houses of Congress at the last session, and I trust will receive final and favorable action at an early day.

The recommendations contained in my last annual message in relation to a mode of settlement of the fishery rights in the waters of

British North America—so long a subject of anxious difference between the United States and Great Britain—was met by an adverse vote of the Senate on April 13th last; and thereupon negotiations were instituted to obtain an agreement with Her Britannic Majesty's government for the promulgation of such joint interpretation and definition of the article of the Convention of 1818, relating to the territorial waters and inshore fisheries of the British Provinces, as should secure the Canadian rights from encroachment by United States fishermen, and, at the same time, ensure the enjoyment by the latter of the privileges guaranteed to them by such convention.

The questions involved are of long standing, of grave consequence, and from time to time for nearly three-quarters of a century, have given rise to earnest international discussions, not unaccompanied by irritation.

Temporary arrangements by treaties have served to allay friction—which, however, has revived as each treaty was terminated. The last arrangement, under the treaty of 1871, was abrogated after due notice by the United States on June 30, 1885, but I was enabled to obtain for our fishermen for the remainder of that season, enjoyment of the full privileges accorded by the terminated treaty.

The Joint High Commission by whom the treaty had been negotiated—although invested with plenary power to make a permanent settlement—were content with a temporary arrangement, after the termination of which the question was relegated to the stipulations of the treaty of 1818, as to the first article of which no construction satisfactory to both countries has ever been agreed upon.

The progress of civilization and growth of population in the British Provinces to which the fisheries in question are contiguous, and the expansion of commercial intercourse between them and the United States, present to-day a condition of affairs scarcely realizable at the date of the negotiations of 1818.

New and vast interests have been brought into existence; modes of intercourse between the respective countries have been invented and multiplied; the methods of conducting the fisheries have been wholly changed; and all this is necessarily entitled to candid and careful consideration in the adjustment of the terms and conditions of intercourse and commerce between the United States and their neighbors along a frontier of over 3,500 miles.

This propinquity, community of language and occupation, and similarity of political and social institutions, indicate the practicability and obvious wisdom of maintaining mutually beneficial and friendly relations.

Whilst I am unfeignedly desirous that such relations should exist between us and the inhabitants of Canada, yet the action of their

officials during the past season towards our fishermen has been such as to seriously threaten their continuance.

Although disappointed in my efforts to secure a satisfactory settlement of the fishery question, negotiations are still pending, with reasonable hope that before the close of the present session of Congress announcement may be made that an acceptable conclusion has been reached.

As at an early day there may be laid before Congress the correspondence of the Department of State in relation to this important subject, so that the history of the past fishing season may be fully disclosed and the action and the attitude of the Administration clearly comprehended, a more extended reference is not deemed necessary in this communication.

The recommendation, submitted last year, that provision be made for a preliminary reconnoissance of the conventional boundary line between Alaska and British Columbia is renewed.

I express my unhesitating conviction that the intimacy of our relations with Hawaii should be emphasized. As a result of the reciprocity treaty of 1875, those islands, on the highway of Oriental and Australasian traffic, are virtually an outpost of American commerce and a stepping-stone to the growing trade of the Pacific. The Polynesian Island groups have been so absorbed by other and more powerful governments, that the Hawaiian Islands are left almost alone in the enjoyment of their autonomy, which it is important for us should be preserved. Our treaty is now terminable on one year's notice, but propositions to abrogate it would be, in my judgment, most ill-advised. The paramount influence we have there acquired, once relinquished, could only with difficulty be regained, and a valuable ground of vantage for ourselves might be converted into a stronghold for our commercial competitors. I earnestly recommend that the existing treaty stipulations be extended for a further term of seven years. A recently signed treaty to this end is now before the Senate.

The importance of telegraphic communication between those islands and the United States should not be overlooked.

The question of a general revision of the treaties of Japan is again under discussion at Tokio. As the first to open relations with that empire, and as the nation in most direct commercial relation with Japan, the United States have lost no opportunity to testify their consistent friendship by supporting the just claims of Japan to autonomy and independence among nations.

A treaty of extradition between the United States and Japan, the first concluded by that empire, has been lately proclaimed.

The weakness of Liberia and the difficulty of maintaining effective sovereignty over its outlying districts, have exposed that republic to encroachment. It cannot be forgotten that this distant community is an offshoot of our own system, owing its origin to the associated benevolence of American citizens, whose praiseworthy efforts to create a nucleus of civilization in the dark continent have commanded respect and sympathy everywhere, especially in this country. Although a formal protectorate over Liberia is contrary to our traditional policy, the moral right and duty of the United States to assist in all proper ways in the maintenance of its integrity is obvious, and has been consistently announced during nearly half a century. I recommend that, in the reorganization of our Navy, a small vessel, no longer found adequate to our needs, be presented to Liberia, to be employed by it in the protection of its coastwise revenues.

The encouraging development of beneficial and intimate relations between the United States and Mexico, which has been so marked within the past few years, is at once the occasion of congratulation and of friendly solicitude. I urgently renew my former representation of the need of speedy legislation by Congress to carry into effect the Reciprocity Commercial Convention of January 20, 1883.

Our commercial treaty of 1831 with Mexico was terminated, according to its provisions, in 1881, upon notification given by Mexico in pursuance of her announced policy of recasting all her commercial treaties. Mexico has since concluded with several foreign governments new treaties of commerce and navigation, defining alien rights of trade, property, and residence, treatment of shipping, consular privileges, and the like. Our yet unexecuted Reciprocity Convention of 1883 covers none of these points, the settlement of which is so necessary to good relationship. I propose to initiate with Mexico negotiations for a new and enlarged treaty of commerce and navigation.

In compliance with a resolution of the Senate, I communicated to that body on August 2d last, and also to the House of Representatives, the correspondence in the case of A. K. Cutting, an American citizen, then imprisoned in Mexico, charged with the commission of a penal offense in Texas, of which a Mexican citizen was the object.

After demand had been made for his release the charge against him was amended so as to include a violation of Mexican law within Mexican territory.

This joinder of alleged offenses, one within and the other exterior to Mexico, induced me to order a special investigation of the case—pending which Mr. Cutting was released.

The incident has, however, disclosed a claim of jurisdiction by Mexico, novel in our history, whereby any offense, committed anywhere by a foreigner, penal in the place of its commission, and of which a Mexican is the object, may, if the offender be found in Mexico, be there tried and punished in conformity with Mexican laws.

This jurisdiction was sustained by the courts of Mexico in the Cutting case, and approved by the executive branch of that government, upon the authority of a Mexican statute. The appellate court, in releasing Mr. Cutting, decided that the abandonment of the complaint by the Mexican citizen aggrieved by the alleged crime (a libelous publication), removed the basis of further prosecution, and also declared justice to have been satisfied by the enforcement of a small part of the original sentence.

The admission of such a pretension would be attended with serious results, invasive of the jurisdiction of this Government, and highly dangerous to our citizens in foreign lands; therefore I have denied it, and protested against its attempted exercise, as unwarranted by the principles of law and international usages.

A sovereign has jurisdiction of offenses which take effect within his territory, although concocted or commenced outside of it; but the right is denied of any foreign sovereign to punish a citizen of the United States for an offense consummated on our soil in violation of our laws, even though the offense be against a subject or citizen of such sovereign. The Mexican statute in question makes the claim broadly, and the principle, if conceded, would create a dual responsibility in the citizen, and lead to inextricable confusion, destructive of that certainty in the law which is an essential of liberty.

When citizens of the United States voluntarily go into a foreign country they must abide by the laws there in force, and will not be protected by their own Government from the consequences of an offense against those laws committed in such foreign country; but watchful care and interest of this Government over its citizens are not relinquished because they have gone abroad; and if charged with crime committed in the foreign land a fair and open trial, conducted with decent regard for justice and humanity, will be demanded for them. With less than that this Government will not be content when the life or liberty of its citizens is at stake.

Whatever the degree to which extraterritorial criminal jurisdiction may have been formerly allowed by consent and reciprocal agreement among certain of the European states, no such doctrine or practice

was ever known to the laws of this country or of that from which our institutions have mainly been derived.

In the case of Mexico there are reasons especially strong for perfect harmony in the mutual exercise of jurisdiction. Nature has made us irrevocably neighbors, and wisdom and kind feeling should make us friends.

The overflow of capital and enterprise from the United States is a potent factor in assisting the development of the resources of Mexico, and in building up the prosperity of both countries.

To assist this good work all grounds of apprehension for the security of person and property should be removed; and I trust that in the interests of good neighborhood the statute referred to will be so modified as to eliminate the present possibilities of danger to the peace of the two countries.

The government of the Netherlands has exhibited concern in relation to certain features of our tariff laws, which are supposed by them to be aimed at a class of tobacco produced in the Dutch East Indies. Comment would seem unnecessary upon the unwisdom of legislation appearing to have a special national discrimination for its object, which, although unintentional, may give rise to injurious retaliation.

The establishment, less than four years ago, of a legation at Teheran is bearing fruit in the interest exhibited by the Shah's government in the industrial activity of the United States and the opportunities of beneficial interchanges.

Stable government is now happily restored in Peru by the election of a constitutional President, and a period of rehabilitation is entered upon. But the recovery is necessarily slow from the exhaustion caused by the late war, and civil disturbances. A convention to adjust, by arbitration, claims of our citizens has been proposed, and is under consideration.

The naval officer who bore to Siberia the testimonials bestowed by Congress in recognition of the aid given to the Jeannette survivors, has successfully accomplished his mission. His interesting report will be submitted. It is pleasant to know that this mark of appreciation has been welcomed by the Russian government and people as befits the traditional friendship of the two countries.

Civil perturbations in the Samoan Islands have during the past few years been a source of considerable embarrassment to the three

governments, Germany, Great Britain, and the United States, whose relations and extraterritorial rights in that important group are guaranteed by treaties. The weakness of the native administration and the conflict of opposing interests in the Islands have led King Malietoa to seek alliance or protection in some one quarter, regardless of the distinct engagements whereby no one of the three treaty powers may acquire any paramount or exclusive interest. In May last Malietoa offered to place Samoa under the protection of the United States, and the late consul, without authority, assumed to grant it. The proceeding was promptly disavowed and the overzealous official recalled. Special agents of the three governments have been deputed to examine the situation in the Islands. With a change in the representation of all three powers, and a harmonious understanding between them, the peace, prosperity, autonomous administration, and neutrality of Samoa can hardly fail to be secured.

It appearing that the government of Spain did not extend to the flag of the United States in the Antilles the full measure of reciprocity requisite under our statute for the continuance of the suspension of discriminations against the Spanish flag in our ports, I was constrained in October last to rescind my predecessor's proclamation of February 14, 1884, permitting such suspension. An arrangement was, however, speedily reached, and upon notification from the government of Spain that all differential treatment of our vessels and their cargoes, from the United States or from any foreign country, had been completely and absolutely relinquished, I availed myself of the discretion conferred by law, and issued on the 27th of October my proclamation, declaring reciprocal suspension in the United States. It is most gratifying to bear testimony to the earnest spirit in which the government of the Queen Regent has met our efforts to avert the initiation of commercial discriminations and reprisals, which are ever disastrous to the material interests and the political good will of the countries they may affect.

The profitable development of the large commercial exchanges between the United States and the Spanish Antilles is naturally an object of solicitude. Lying close at our doors, and finding here their main markets of supply and demand, the welfare of Cuba and Porto Rico and their production and trade, are scarcely less important to us than to Spain. Their commercial and financial movements are so naturally a part of our system that no obstacle to fuller and freer intercourse should be permitted to exist. The standing instructions of our representatives at Madrid and Havana have for years been to leave no effort unessayed to further these ends, and at no time has

the equal good desire of Spain been more hopefully manifested than now.

The government of Spain, by removing the consular tonnage fees on cargoes shipped to the Antilles, and by reducing passport fees, has shown its recognition of the needs of less trammelled intercourse.

An effort has been made during the past year to remove the hinderances to the proclamation of the treaty of naturalization with the Sublime Porte, signed in 1874, which has remained inoperative owing to a disagreement of interpretation of the clauses relative to the effects of the return to and sojourn of a naturalized citizen in the land of origin. I trust soon to be able to announce a favorable settlement of the differences as to this interpretation.

It has been highly satisfactory to note the improved treatment of American missionaries in Turkey, as has been attested by their acknowledgments to our late minister to that government of his successful exertions in their behalf.

The exchange of ratifications of the convention of December 5, 1885, with Venezuela, for the reopening of the awards of the Caracas Commission under the Claims Convention of 1866, has not yet been effected owing to the delay of the Executive of that republic in ratifying the measure. I trust that this postponement will be brief; but should it much longer continue, the delay may well be regarded as a rescission of the compact and a failure on the part of Venezuela to complete an arrangement so persistently sought by her during many years and assented to by this Government in a spirit of international fairness, although to the detriment of holders of bona fide awards of the impugned commission.

I renew the recommendation of my last annual message, that existing legislation concerning citizenship and naturalization be revised. We have treaties with many states providing for the renunciation of citizenship by naturalized aliens, but no statute is found to give effect to such engagements, nor any which provides a needed central bureau for the registration of naturalized citizens.

Experience suggests that our statutes regulating extradition might be advantageously amended by a provision for the transit across our territory, now a convenient thoroughfare of travel from one foreign country to another, of fugitives surrendered by a foreign government to a third state. Such provisions are not unusual in the legislation of other countries, and tend to prevent the miscarriage of justice.

It is also desirable, in order to remove present uncertainties, that authority should be conferred on the Secretary of State to issue a certificate in case of an arrest for the purpose of extradition, to the officer before whom the proceeding is pending, showing that a requisition for the surrender of the person charged has been duly made. Such a certificate, if required to be received before the prisoner's examination, would prevent a long and expensive judicial inquiry into a charge which the foreign government might not desire to press. I also recommend that express provision be made for the immediate discharge from custody of persons committed for extradition where the President is of opinion that surrender should not be made.

The drift of sentiment in civilized communities toward full recognition of the rights of property in the creations of the human intellect has brought about the adoption, by many important nations, of an International Copyright Convention, which was signed at Berne on the 18th of September, 1885.

Inasmuch as the Constitution gives to Congress the power "to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries," this Government did not feel warranted in becoming a signatory pending the action of Congress upon measures of international copyright now before it, but the right of adhesion to the Berne Convention hereafter, has been reserved. I trust the subject will receive at your hands the attention it deserves, and that the just claims of authors, so urgently pressed, will be duly heeded.

Representations continue to be made to me of the injurious effect upon American artists studying abroad and having free access to the art collections of foreign countries, of maintaining a discriminating duty against the introduction of the works of their brother artists of other countries; and I am induced to repeat my recommendation for the abolition of that tax.

Pursuant to a provision of the diplomatic and consular appropriation act, approved July 1, 1886, the estimates submitted by the Secretary of State for the maintenance of the consular service have been recast, on the basis of salaries for all officers to whom such allowance is deemed advisable. Advantage has been taken of this to redistribute the salaries of the offices now appropriated for, in accordance with the work performed, the importance of the representa-

tive duties of the incumbent, and the cost of living at each post. The last consideration has been too often lost sight of in the allowances heretofore made. The compensation which may suffice for the decent maintenance of a worthy and capable officer in a position of onerous and representative trust at a post readily accessible, and where the necessities of life are abundant and cheap, may prove an inadequate pittance in distant lands, where the better part of a year's pay is consumed in reaching the post of duty, and where the comforts of ordinary civilized existence can only be obtained with difficulty and at exorbitant cost. I trust that, in considering the submitted schedules, no mistaken theory of economy will perpetuate a system which in the past has virtually closed to deserving talent many offices where capacity and attainments of a high order are indispensable, and in not a few instances has brought discredit on our national character and entailed embarrassment and even suffering on those deputed to uphold our dignity and interests abroad.

In connection with this subject I earnestly reiterate the practical necessity of supplying some mode of trustworthy inspection and report, of the manner in which the consulates are conducted. In the absence of such reliable information, efficiency can scarcely be rewarded, or its opposite corrected.

Increasing competition in trade has directed attention to the value of the consular reports printed by the Department of State, and the efforts of the Government to extend the practical usefulness of these reports have created a wider demand for them at home and a spirit of emulation abroad. Constituting a record of the changes occurring in trade and of the progress of the arts and invention in foreign countries, they are much sought for by all interested in the subjects which they embrace.

The report of the Secretary of the Treasury exhibits in detail the condition of the public finances and of the several branches of the Government related to his Department. I especially direct the attention of the Congress to the recommendations contained in this and the last preceding report of the Secretary, touching the simplification and amendment of the laws relating to the collection of our revenues; and in the interest of economy and justice to the Government, I hope they may be adopted by appropriate legislation.

The ordinary receipts of the Government for the fiscal year ended June 30, 1886, were \$336,439,727.06. Of this amount \$192,905,023.41 was received from customs and \$116,805,936.48 from internal revenue." The total receipts, as here stated, were \$13,749,020.68 greater

than for the previous year, but the increase from customs was \$11,434,084.10, and from internal revenue \$4,407,210.94, making a gain in these items for the last year of \$15,841,295.04—a falling off in other resources reducing the total increase to the smaller amount mentioned.

The expense at the different custom-houses, of collecting this increased customs revenue was less than the expense attending the collection of such revenue for the preceding year by \$490,608; and the increased receipts of internal revenue were collected at a cost to the Internal-Revenue Bureau \$155,944.99 less than the expense of such collection for the previous year.

The total ordinary expenses of the Government for the fiscal year ended June 30, 1886, were \$242,483,138.50, being less by \$17,788,797 than such expenditures for the year preceding, and leaving a surplus in the Treasury at the close of the last fiscal year of \$93,956,588.56 as against \$63,463,771.27 at the close of the previous year, being an increase in such surplus of \$30,492,817.29.

The expenditures are compared with those of the preceding fiscal year and classified as follows:

	Year ending June 30, 1886.	Year ending June 30, 1885.
For civil expenses	\$21,955,604 04	\$23,826,942 11
For foreign intercourse	1,332,320 88	5,439,609 11
For Indians	6,099,158 17	6,552,494 63
For pensions	63,404,864 03	56,102,267 49
For the military, including river and harbor improve- ments and arsenals	34,324,152 74	42,670,578 47
For the Navy, including vessels, machinery, and im- provement of navy-yards	13,907,887 74	16,021,079 69
For interest on public debt	50,580,145 97	51,386,256 47
For the District of Columbia	2,892,321 89	3,499,650 95
Miscellaneous expenditures, including public build- ings, light-houses, and collecting the revenue	47,986,683 04	54,728,056 21

For the current year to end June 30, 1887, the ascertained receipts up to October 1, 1886, with such receipts estimated for the remainder of the year, amount to \$356,000,000.

The expenditures ascertained and estimated for the same period are \$266,000,000, indicating an anticipated surplus at the close of the year of \$90,000,000.

The total value of the exports from the United States to foreign countries during the fiscal year is stated and compared with the preceding year as follows:

	For the year ending June 30, 1886.	For the year ending June 30, 1885.
Domestic merchandise	\$665, 964, 529 00	\$726, 682, 946 00
Foreign merchandise	13, 560, 301 00	15, 506, 809 00
Gold	42, 952, 191 00	8, 477, 892 00
Silver	29, 511, 219 00	33, 753, 633 00

The value of some of our leading exports during the last fiscal year, as compared with the value of the same for the year immediately preceding, is here given, and furnishes information both interesting and suggestive:

	For the year ending June 30, 1886.	For the year ending June 30, 1885.
Cotton and cotton manufactures	\$219, 045, 576 00	\$213, 799, 049 00
Tobacco and its manufactures	30, 424, 908 00	24, 767, 305 00
Breadstuffs	125, 846, 558 00	160, 370, 821 00
Provisions	90, 625, 216 00	107, 332, 456 00

Our imports during the last fiscal year, as compared with the previous year, were as follows:

	1886.	1885.
Merchandise	\$635, 436, 136 00	\$579, 580, 053 80
Gold	20, 743, 349 00	26, 691, 696 00
Silver	17, 850, 307 00	16, 550, 627 00

In my last annual message to the Congress attention was directed to the fact that the revenues of the Government exceeded its actual needs; and it was suggested that legislative action should be taken to relieve the people from the unnecessary burden of taxation thus made apparent.

In view of the pressing importance of the subject I deem it my duty to again urge its consideration.

The income of the Government, by its increased volume and through economies in its collection, is now more than ever in excess of public necessities. The application of the surplus to the payment of such portion of the public debt as is now at our option subject to extinguishment, if continued at the rate which has lately prevailed, would retire that class of indebtedness within less than one year from this date. Thus a continuation of our present revenue system would soon result in the receipt of an annual income much greater than necessary to meet Government expenses, with no indebtedness upon which it could be applied. We should then be confronted with a vast quantity of money, the circulating medium of the people, hoarded in the Treasury when it should be in their hands, or we should be drawn into wasteful public extravagance with all the corrupting national demoralization which follows in its train.

But it is not the simple existence of this surplus and its threatened attendant evils, which furnish the strongest argument against our present scale of Federal taxation. Its worst phase is the exaction of such a surplus through a perversion of the relations between the people and their Government, and a dangerous departure from the rules which limit the right of Federal taxation.

Good government, and especially the government of which every American citizen boasts, has for its objects, the protection of every person within its care in the greatest liberty consistent with the good order of society, and his perfect security in the enjoyment of his earnings, with the least possible diminution for public needs. When more of the people's substance is exacted through the form of taxation than is necessary to meet the just obligations of the Government and the expense of its economical administration, such exaction becomes ruthless extortion and a violation of the fundamental principles of a free Government.

The indirect manner in which these exactions are made, has a tendency to conceal their true character and their extent. But we have arrived at a stage of superfluous revenue which has aroused the people to a realization of the fact, that the amount raised professedly for the support of the Government, is paid by them as absolutely, if added to the price of the things which supply their daily wants, as if it was paid at fixed periods into the hand of the tax-gatherer.

Those who toil for daily wages are beginning to understand that capital, though sometimes vaunting its importance and clamoring for the protection and favor of the Government, is dull and sluggish, till, touched by the magical hand of labor, it springs into activity, furnishing an occasion for Federal taxation and gaining

the value which enables it to bear its burden. And the laboring man is thoughtfully inquiring whether in these circumstances, and considering the tribute he constantly pays into the public Treasury as he supplies his daily wants, he receives his fair share of advantages.

There is also a suspicion abroad, that the surplus of our revenues indicates abnormal and exceptional business profits, which, under the system which produces such surplus, increase without corresponding benefit to the people at large, the vast accumulations of a few among our citizens whose fortunes, rivaling the wealth of the most favored in anti-democratic nations, are not the natural growth of a steady, plain and industrious republic.

Our farmers too, and those engaged directly and indirectly in supplying the products of agriculture, see that day by day, and as often as the daily wants of their households recur, they are forced to pay excessive and needless taxation, while their products struggle in foreign markets with the competition of nations, which by allowing a freer exchange of productions than we permit, enable their people to sell for prices which distress the American farmer.

As every patriotic citizen rejoices in the constantly increasing pride of our people in American citizenship and in the glory of our national achievements and progress, a sentiment prevails that the leading-strings useful to a nation in its infancy, may well be to a great extent discarded in the present stage of American ingenuity, courage and fearless self-reliance. And for the privilege of indulging this sentiment with true American enthusiasm, our citizens are quite willing to forego an idle surplus in the public Treasury.

And all the people know that the average rate of Federal taxation upon imports is to-day, in time of peace, but little less, while upon some articles of necessary consumption it is actually more, than was imposed by the grievous burden willingly borne, at a time when the Government needed millions to maintain by war the safety and integrity of the Union.

It has been the policy of the Government to collect the principal part of its revenues by a tax upon imports; and no change in this policy is desirable. But the present condition of affairs constrains our people to demand, that by a revision of our revenue laws, the receipts of the Government shall be reduced to the necessary expense of its economical administration; and this demand should be recognized and obeyed by the people's representatives in the legislative branch of the Government.

In readjusting the burdens of Federal taxation, a sound public policy requires that such of our citizens as have built up large and

important industries under present conditions, should not be suddenly and to their injury, deprived of advantages to which they have adapted their business; but if the public good requires it, they should be content with such consideration as shall deal fairly and cautiously with their interests, while the just demand of the people for relief from needless taxation is honestly answered.

A reasonable and timely submission to such a demand should certainly be possible without disastrous shock to any interest; and a cheerful concession sometimes averts abrupt and heedless action, often the outgrowth of impatience and delayed justice.

Due regard should be also accorded in any proposed readjustment, to the interests of American labor so far as they are involved. We congratulate ourselves that there is among us no laboring class, fixed within unyielding bounds and doomed under all conditions to the inexorable fate of daily toil. We recognize in labor a chief factor in the wealth of the republic, and we treat those who have it in their keeping as citizens entitled to the most careful regard and thoughtful attention. This regard and attention should be awarded them, not only because labor is the capital of our workingmen, justly entitled to its share of Government favor, but for the further and not less important reason, that the laboring man surrounded by his family in his humble home, as a consumer is vitally interested in all that cheapens the cost of living and enables him to bring within his domestic circle, additional comforts and advantages.

This relation of the workingman to the revenue laws of the country, and the manner in which it palpably influences the question of wages, should not be forgotten in the justifiable prominence given to the proper maintenance of the supply and protection of well-paid labor. And these considerations suggest such an arrangement of Government revenues as shall reduce the expense of living, while it does not curtail the opportunity for work nor reduce the compensation of American labor, and injuriously affect its condition and the dignified place it holds in the estimation of our people.

But our farmers and agriculturists—those who from the soil produce the things consumed by all—are perhaps more directly and plainly concerned than any other of our citizens, in a just and careful system of Federal taxation. Those actually engaged in and more remotely connected with this kind of work, number nearly one-half of our population. None labor harder or more continuously than they. No enactments limit their hours of toil, and no interposition of the Government enhances to any great extent the value of their products. And yet for many of the necessities and comforts of life, which the most scrupulous economy enables them to bring

into their homes, and for their implements of husbandry, they are obliged to pay a price largely increased by an unnatural profit which, by the action of the Government, is given to the more favored manufacturer.

I recommend that, keeping in view all these considerations, the increasing and unnecessary surplus of national income annually accumulating, be released to the people, by an amendment to our revenue laws which shall cheapen the price of the necessities of life and give freer entrance to such imported materials as by American labor may be manufactured into marketable commodities.

Nothing can be accomplished however, in the direction of this much-needed reform, unless the subject is approached in a patriotic spirit of devotion to the interests of the entire country and with a willingness to yield something for the public good.

The sum paid upon the public debt during the fiscal year ended June 30, 1886, was \$44,551,043.36.

During the twelve months ended October 31, 1886, three per cent. bonds were called for redemption amounting to \$127,283,100, of which \$80,643,200 was so called to answer the requirements of the law relating to the sinking fund and \$46,639,900 for the purpose of reducing the public debt by application of a part of the surplus in the Treasury to that object. Of the bonds thus called \$102,269,450 became subject under such calls to redemption prior to November 1, 1886. The remainder, amounting to \$25,013,650, matured under the calls after that date.

In addition to the amount subject to payment and cancellation prior to November 1st, there were also paid before that day certain of these bonds, with the interest thereon, amounting to \$5,072,350, which were anticipated as to their maturity, of which \$2,664,850 had not been called. Thus \$107,341,800 had been actually applied prior to the 1st of November 1886, to the extinguishment of our bonded and interest-bearing debt, leaving on that day still outstanding the sum of \$1,153,443,112. Of this amount \$86,848,700 were still represented by three per cent. bonds. They, however, have been since November 1st, or will at once be, further reduced by \$22,606,150, being bonds which have been called, as already stated, but not redeemed and canceled before the latter date.

During the fiscal year ended June 30, 1886, there were coined under the compulsory silver-coinage act of 1878, 29,838,905 silver dollars, and the cost of the silver used in such coinage was \$23,448,960.01. There had been coined up to the close of the previous fiscal year under the provisions of the law, 203,882,554 silver dollars, and on

the 1st day of December, 1886, the total amount of such coinage was \$247,131,549.

The Director of the Mint reports that at the time of the passage of the law of 1878 directing this coinage, the intrinsic value of the dollars thus coined was ninety-four and one-fourth cents each, and that on the 31st day of July 1886, the price of silver reached the lowest stage ever known, so that the intrinsic or bullion price of our standard silver dollar at that date was less than seventy-two cents. The price of silver on the 30th day of November last was such as to make these dollars intrinsically worth seventy-eight cents each.

These differences in value of the coins represent the fluctuations in the price of silver, and they certainly do not indicate that compulsory coinage by the Government enhances the price of that commodity or secures uniformity in its value.

Every fair and legal effort has been made by the Treasury Department to distribute this currency among the people. The withdrawal of United States Treasury notes of small denominations, and the issuing of small silver certificates have been resorted to in the endeavor to accomplish this result, in obedience to the will and sentiments of the representatives of the people in the Congress. On the 27th day of November, 1886, the people held of these coins, or certificates representing them, the nominal sum of \$166,873,041, and we still had \$79,464,345 in the Treasury—as against about \$142,894,055 so in the hands of the people, and \$72,865,376 remaining in the Treasury one year ago. The Director of the Mint again urges the necessity of more vault room for the purpose of storing these silver dollars which are not needed for circulation by the people.

I have seen no reason to change the views expressed in my last annual message on the subject of this compulsory coinage; and I again urge its suspension on all the grounds contained in my former recommendation, reinforced by the significant increase of our gold exportations during the last year, as appears by the comparative statement herewith presented, and for the further reasons that the more this currency is distributed among the people the greater becomes our duty to protect it from disaster; that we now have abundance for all our needs; and that there seems but little propriety in building vaults to store such currency when the only pretense for its coinage is the necessity of its use by the people as a circulating medium.

The great number of suits now pending in the United States courts for the southern district of New York, growing out of the collection of customs revenue at the port of New York, and the number of such suits that are almost daily instituted, are certainly worthy the attention of the Congress. These legal controversies

based upon conflicting views by importers and the collector as to the interpretation of our present complex and indefinite revenue laws, might be largely obviated by an amendment of those laws.

But pending such amendment the present condition of this litigation should be relieved. There are now pending about twenty-five hundred of these suits. More than eleven hundred have been commenced within the past eighteen months, and many of the others have been at issue for more than twenty-five years. These delays subject the Government to loss of evidence and prevent the preparation necessary to defeat unjust and fictitious claims, while constantly accruing interest threatens to double the demands involved.

In the present condition of the dockets of the courts, well filled with private suits, and of the force allowed the district attorney, no greater than is necessary for the ordinary and current business of his office, these revenue litigations cannot be considered.

In default of the adoption by the Congress of a plan for the general reorganization of the Federal courts as has been heretofore recommended, I urge the propriety of passing a law permitting the appointment of an additional Federal judge in the district where these Government suits have accumulated, so that by continuous sessions of the courts devoted to the trial of these cases, they may be determined.

It is entirely plain that a great saving to the Government would be accomplished by such a remedy, and the suitors who have honest claims would not be denied justice through delay.

The report of the Secretary of War gives a detailed account of the administration of his Department, and contains sundry recommendations for the improvement of the service which I fully approve.

The Army consisted at the date of the last consolidated return, of two thousand one hundred and three officers and twenty-four thousand nine hundred and forty-six enlisted men.

The expenses of the Department for the last fiscal year were \$36,990,903.38, including \$6,294,305.43 for public works and river and harbor improvements.

I especially direct the attention of the Congress to the recommendation that officers be required to submit to an examination as a preliminary to their promotion. I see no objection but many advantages in adopting this feature, which has operated so beneficially in our Navy Department, as well as in some branches of the Army.

The subject of coast defenses and fortifications has been fully and carefully treated by the Board on Fortifications whose report was sub-

mitted at the last session of Congress; but no construction work of the kind recommended by the Board has been possible during the last year from the lack of appropriations for such purpose.

The defenseless condition of our sea-coast and lake frontier is perfectly palpable; the examinations made must convince us all that certain of our cities named in the report of the Board should be fortified, and that work on the most important of these fortifications should be commenced at once; the work has been thoroughly considered and laid out the Secretary of War reports, but all is delayed in default of Congressional action.

The absolute necessity, judged by all standards of prudence and foresight, of our preparation for an effectual resistance against the armored ships and steel guns and mortars of modern construction which may threaten the cities on our coasts, is so apparent that I hope effective steps will be taken in that direction immediately.

The valuable and suggestive treatment of this question by the Secretary of War is earnestly commended to the consideration of the Congress.

In September and October last the hostile Apaches who, under the leadership of Geronimo, had for eighteen months been on the war path, and during that time had committed many murders and been the cause of constant terror to the settlers of Arizona, surrendered to General Miles, the military commander who succeeded General Crook in the management and direction of their pursuit.

Under the terms of their surrender as then reported, and in view of the understanding which these murderous savages seemed to entertain of the assurances given them, it was considered best to imprison them in such manner as to prevent their ever engaging in such outrages again, instead of trying them for murder. Fort Pickens having been selected as a safe place of confinement, all the adult males were sent thither and will be closely guarded as prisoners. In the meantime the residue of the band, who though still remaining upon the reservation were regarded as unsafe, and suspected of furnishing aid to those on the war path, had been removed to Fort Marion. The women and larger children of the hostiles were also taken there, and arrangements have been made for putting the children of proper age in Indian schools.

The report of the Secretary of the Navy contains a detailed exhibit of the condition of his Department with such a statement of the action needed to improve the same as should challenge the earnest attention of the Congress.

The present Navy of the United States, aside from the ships in course of construction, consists of—

First, fourteen single-turreted monitors, none of which are in commission, nor at the present time serviceable. The batteries of these ships are obsolete, and they can only be relied upon as auxiliary ships in harbor defense, and then after such an expenditure upon them as might not be deemed justifiable.

Second, five fourth-rate vessels of small tonnage, only one of which was designed as a war vessel, and all of which are auxiliary, merely.

Third, twenty-seven cruising ships, three of which are built of iron, of small tonnage, and twenty-four of wood. Of these wooden vessels it is estimated by the Chief Constructor of the Navy that only three will be serviceable beyond a period of six years, at which time it may be said that of the present naval force nothing worthy the name will remain.

All the vessels heretofore authorized are under contract or in course of construction, except the armored ships, the torpedo and dynamite boats, and one cruiser. As to the last of these, the bids were in excess of the limit fixed by Congress. The production in the United States of armor and gun-steel is a question which it seems necessary to settle at an early day, if the armored war vessels are to be completed with those materials of home manufacture. This has been the subject of investigation by two Boards, and by two Special Committees of Congress within the last three years. The report of the Gun Foundry Board in 1884, of the Board on Fortifications made in January last, and the reports of the Select Committees of the two Houses made at the last session of Congress, have entirely exhausted the subject, so far as preliminary investigation is involved, and in their recommendations they are substantially agreed.

In the event that the present invitation of the Department for bids to furnish such of this material as is now authorized, shall fail to induce domestic manufacturers to undertake the large expenditures required to prepare for this new manufacture, and no other steps are taken by Congress at its coming session, the Secretary contemplates with dissatisfaction the necessity of obtaining abroad the armor and the gun-steel for the authorized ships. It would seem desirable that the wants of the Army and the Navy in this regard should be reasonably met, and that by uniting their contracts, such inducement might be offered as would result in securing the domestication of these important interests.

The affairs of the postal service show marked and gratifying improvement during the past year. A particular account of its transactions and condition is given in the report of the Postmaster-General which will be laid before you.

The reduction of the rate of letter postage in 1883, rendering the postal revenues inadequate to sustain the expenditures, and business-depression also contributing, resulted in an excess of cost for the fiscal year ended June 30, 1885, of eight and one-third millions of dollars. An additional check upon receipts by doubling the measure of weight in rating sealed correspondence and diminishing one-half the charge for newspaper carriage, was imposed by legislation which took effect with the beginning of the past fiscal year; while the constant demand of our territorial development and growing population, for the extension and increase of mail facilities and machinery, necessitates steady annual advance in outlay; and the careful estimate of a year ago upon the rates of expenditure then existing, contemplated the unavoidable augmentation of the deficiency in the last fiscal year by nearly two millions of dollars. The anticipated revenue for the last year failed of realization by about \$64,000; but proper measures of economy have so satisfactorily limited the growth of expenditure, that the total deficiency, in fact, fell below that of 1885; and at this time the increase of revenue is in a gaining ratio over the increase of cost, demonstrating the sufficiency of the present rates of postage ultimately to sustain the service. This is the more pleasing because our people enjoy now both cheaper postage, proportionably to distances, and a vaster and more costly service, than any other upon the globe.

Retrenchment has been effected in the cost of supplies, some expenditures unwarranted by law have ceased, and the outlays for mail carriage have been subjected to beneficial scrutiny. At the close of the last fiscal year the expense of transportation on star routes stood at an annual rate of cost less by over \$560,000 than at the close of the previous year; and steamboat and mail-messenger service at nearly \$200,000 less.

The service has been in the meantime enlarged and extended by the establishment of new offices, increase of routes of carriage, expansion of carrier delivery conveniences, and additions to the railway mail facilities, in accordance with the growing exigencies of the country and the long-established policy of the Government. •

The Postmaster-General calls attention to the existing law for compensating railroads, and expresses the opinion that a method may be devised which will prove more just to the carriers and beneficial to the Government; and the subject appears worthy of your early consideration.

The differences which arose during the year with certain of the ocean steamship companies, have terminated by the acquiescence of all in the policy of the Government approved by the Congress in

the postal appropriation at its last session; and the Department now enjoys the utmost service afforded by all vessels which sail from our ports upon either ocean—a service generally adequate to the needs of our intercourse. Petitions have however been presented to the Department by numerous merchants and manufacturers for the establishment of a direct service to the Argentine Republic and for semi-monthly dispatches to the Empire of Brazil; and the subject is commended to your consideration. It is an obvious duty to provide the means of postal communication which our commerce requires, and with prudent forecast of results, the wise extension of it may lead to stimulating intercourse and become the harbinger of a profitable traffic, which will open new avenues for the disposition of the products of our industry. The circumstances of the countries at the far south of our continent, are such as to invite our enterprise and afford the promise of sufficient advantages to justify an unusual effort to bring about the closer relations which greater freedom of communication would tend to establish.

I suggest that as distinguished from a grant or subsidy for the mere benefit of any line of trade or travel, whatever outlay may be required to secure additional postal service, necessary and proper and not otherwise attainable, should be regarded as within the limit of legitimate compensation for such service.

The extension of the free-delivery service as suggested by the Postmaster-General has heretofore received my sanction, and it is to be hoped a suitable enactment may soon be agreed upon.

The request for an appropriation sufficient to enable the general inspection of fourth-class offices has my approbation.

I renew my approval of the recommendation of the Postmaster-General that another assistant be provided for the Post-Office Department; and I invite your attention to the several other recommendations in his report.

The conduct of the Department of Justice for the last fiscal year is fully detailed in the report of the Attorney-General, and I invite the earnest attention of the Congress to the same, and due consideration of the recommendations therein contained.

In the report submitted by this officer to the last session of the Congress he strongly recommended the erection of a penitentiary for the confinement of prisoners convicted and sentenced in the United States courts; and he repeats the recommendation in his report for the last year.

This is a matter of very great importance and should at once receive Congressional action. United States prisoners are now con-

fined in more than thirty different State prisons and penitentiaries scattered in every part of the country. They are subjected to nearly as many different modes of treatment and discipline and are far too much removed from the control and regulation of the Government. So far as they are entitled to humane treatment and an opportunity for improvement and reformation, the Government is responsible to them and society that these things are forthcoming. But this duty can scarcely be discharged without more absolute control and direction than is possible under the present system.

Many of our good citizens have interested themselves, with the most beneficial results, in the question of prison reform. The General Government should be in a situation, since there must be United States prisoners, to furnish important aid in this movement, and should be able to illustrate what may be practically done in the direction of this reform and to present an example in the treatment and improvement of its prisoners worthy of imitation.

With prisons under its own control, the Government could deal with the somewhat vexed question of convict labor, so far as its convicts were concerned, according to a plan of its own adoption, and with due regard to the rights and interests of our laboring citizens, instead of sometimes aiding in the operation of a system which causes among them irritation and discontent.

Upon consideration of this subject it might be thought wise to erect more than one of these institutions, located in such places as would best subserve the purposes of convenience and economy in transportation. The considerable cost of maintaining these convicts as at present, in State institutions, would be saved by the adoption of the plan proposed; and by employing them in the manufacture of such articles as were needed for use by the Government, quite a large pecuniary benefit would be realized in partial return for our outlay.

I again urge a change in the Federal judicial system to meet the wants of the people and obviate the delays necessarily attending the present condition of affairs in our courts. All are agreed that something should be done, and much favor is shown by those well able to advise, to the plan suggested by the Attorney-General at the last session of the Congress and recommended in my last annual message. This recommendation is here renewed, together with another made at the same time, touching a change in the manner of compensating district attorneys and marshals; and the latter subject is commended to the Congress for its action, in the interest of economy to the Government, and humanity, fairness, and justice to our people.

The report of the Secretary of the Interior presents a comprehensive summary of the work of the various branches of the public service connected with his Department; and the suggestions and recommendations which it contains for the improvement of the service should receive your careful consideration.

The exhibit made of the condition of our Indian population and the progress of the work for their enlightenment, notwithstanding the many embarrassments which hinder the better administration of this important branch of the service, is a gratifying and hopeful one.

The funds appropriated for the Indian service for the fiscal year just passed, with the available income from Indian land and trust moneys, amounting in all to \$7,850,775.12, were ample for the service under the conditions and restrictions of laws regulating their expenditure. There remained a balance on hand on June 30, 1886, of \$1,660,023.30, of which \$1,337,768.21 are permanent funds for fulfillment of treaties, and other like purposes, and the remainder, \$322,255.09, is subject to be carried to the surplus fund as required by law.

The estimates presented for appropriations for the ensuing fiscal year amount to \$5,608,873.64, or \$442,386.20 less than those laid before the Congress last year.

The present system of agencies, while absolutely necessary and well adapted for the management of our Indian affairs and for the ends in view, when it was adopted, is in the present stage of Indian management inadequate, standing alone, for the accomplishment of an object which has become pressing in its importance—the more rapid transition from tribal organizations to citizenship, of such portions of the Indians as are capable of civilized life.

When the existing system was adopted the Indian race was outside of the limits of organized States and Territories, and beyond the immediate reach and operation of civilization; and all efforts were mainly directed to the maintenance of friendly relations and the preservation of peace and quiet on the frontier. All this is now changed. There is no such thing as the Indian frontier. Civilization, with the busy hum of industry and the influences of Christianity, surrounds these people at every point. None of the tribes are outside of the bounds of organized government and society, except that the territorial system has not been extended over that portion of the country known as the Indian Territory. As a race the Indians are no longer hostile but may be considered as submissive to the control of the Government; few of them only are troublesome. Except the fragments of several bands all are now gathered upon reservations.

It is no longer possible for them to subsist by the chase and the spontaneous productions of the earth.

With an abundance of land, if furnished with the means and implements for profitable husbandry, their life of entire dependence upon Government rations from day to day is no longer defensible. Their inclination, long fostered by a defective system of control, is to cling to the habits and customs of their ancestors and struggle with persistence against the change of life which their altered circumstances press upon them. But barbarism and civilization cannot live together. It is impossible that such incongruous conditions should coexist on the same soil.

They are a portion of our people, are under the authority of our Government, and have a peculiar claim upon and are entitled to, the fostering care and protection of the nation. The Government cannot relieve itself of this responsibility until they are so far trained and civilized as to be able wholly to manage and care for themselves. The paths in which they should walk must be clearly marked out for them and they must be led or guided until they are familiar with the way and competent to assume the duties and responsibilities of our citizenship.

Progress in this great work will continue only at the present slow pace and at great expense, unless the system and methods of management are improved to meet the changed conditions and urgent demands of the service.

The agents having general charge and supervision in many cases of more than five thousand Indians, scattered over large reservations, and burdened with the details of accountability for funds and supplies, have time to look after the industrial training and improvement of a few Indians only; the many are neglected and remain idle and dependent—conditions not favorable for progress in civilization.

The compensation allowed these agents and the conditions of the service, are not calculated to secure for the work men who are fitted by ability and skill to properly plan and intelligently direct the methods best adapted to produce the most speedy results and permanent benefits.

Hence the necessity for a supplemental agency or system, directed to the end of promoting the general and more rapid transition of the tribes from habits and customs of barbarism to the ways of civilization.

With an anxious desire to devise some plan of operation by which to secure the welfare of the Indians, and to relieve the Treasury as far as possible from the support of an idle and dependent population, I recommended in my previous annual message the passage of a law

authorizing the appointment of a commission as an instrumentality auxiliary to those already established, for the care of the Indians. It was designed that this commission should be composed of six intelligent and capable persons—three to be detailed from the Army—having practical ideas upon the subject of the treatment of Indians, and interested in their welfare; and that it should be charged, under the direction of the Secretary of the Interior, with the management of such matters of detail as cannot with the present organization be properly and successfully conducted, and which present different phases, as the Indians themselves differ, in their progress, needs, disposition, and capacity for improvement or immediate self-support.

By the aid of such a commission much unwise and useless expenditure of money, waste of materials, and unavailing efforts might be avoided; and it is hoped that this or some measure which the wisdom of Congress may better devise, to supply the deficiency of the present system, may receive your consideration, and the appropriate legislation be provided.

The time is ripe for the work of such an agency.

There is less opposition to the education and training of the Indian youth, as shown by the increased attendance upon the schools, and there is a yielding tendency for the individual holding of lands. Development and advancement in these directions are essential, and should have every encouragement. As the rising generation are taught the language of civilization and trained in habits of industry, they should assume the duties, privileges, and responsibilities of citizenship.

No obstacle should hinder the location and settlement of any Indian willing to take land in severalty; on the contrary, the inclination to do so should be stimulated at all times when proper and expedient. But there is no authority of law for making allotments on some of the reservations, and on others the allotments provided for are so small, that the Indians, though ready and desiring to settle down, are not willing to accept such small areas, when their reservations contain ample lands to afford them homesteads of sufficient size to meet their present and future needs.

These inequalities of existing special laws and treaties, should be corrected and some general legislation on the subject should be provided, so that the more progressive members of the different tribes may be settled upon homesteads, and by their example lead others to follow, breaking away from tribal customs and substituting therefor the love of home, the interest of the family, and the rule of the state.

The Indian character and nature are such that they are not easily led while brooding over unadjusted wrongs. This is especially so

regarding their lands. Matters arising from the construction and operation of railroads across some of the reservations, and claims of title and right of occupancy set up by white persons to some of the best land within other reservations, require legislation for their final adjustment.

The settlement of these matters will remove many embarrassments to progress in the work of leading the Indians to the adoption of our institutions and bringing them under the operation, the influence, and the protection of the universal laws of our country.

The recommendations of the Secretary of the Interior and the Commissioner of the General Land Office looking to the better protection of public lands and of the public surveys, the preservation of national forests, the adjudication of grants to States and corporations and of private land claims, and the increased efficiency of the public land service, are commended to the attention of Congress. To secure the widest distribution of public lands in limited quantities among settlers for residence and cultivation and thus make the greatest number of individual homes, was the primary object of the public land legislation in the early days of the republic. This system was a simple one. It commenced with an admirable scheme of public surveys, by which the humblest citizen could identify the tract upon which he wished to establish his home. The price of lands was placed within the reach of all the enterprising, industrious, and honest pioneer citizens of the country. It was soon, however, found that the object of the laws was perverted under the system of cash sales, from a distribution of land among the people to an accumulation of land capital by wealthy and speculative persons. To check this tendency a preference right of purchase was given to settlers on the land, a plan which culminated in the general pre-emption act of 1841. The foundation of this system was actual residence and cultivation. Twenty years later the homestead law was devised to more surely place actual homes in the possession of actual cultivators of the soil. The land was given without price, the sole conditions being residence, improvement, and cultivation. Other laws have followed, each designed to encourage the acquirement and use of land in limited individual quantities. But in later years these laws through vicious administrative methods and under changed conditions of communication and transportation, have been so evaded and violated that their beneficent purpose is threatened with entire defeat. The methods of such evasions and violations are set forth in detail in the reports of the Secretary of the Interior and Commissioner of the General Land Office. The rapid appropriation of our public lands without bona

vide settlements or cultivation, and not only without intention of residence, but for the purpose of their aggregation in large holdings, in many cases in the hands of foreigners, invites the serious and immediate attention of the Congress.

The energies of the land department have been devoted during the present administration to remedy defects and correct abuses in the public land service. The results of these efforts are so largely in the nature of reforms in the processes and methods of our land system as to prevent adequate estimate; but it appears by a compilation from the reports of the Commissioner of the General Land Office that the immediate effect in leading cases which have come to a final termination has been the restoration to the mass of public lands of two million seven hundred and fifty thousand acres; that two million three hundred and seventy thousand acres are embraced in investigations now pending before the Department or the courts, and that the action of Congress has been asked to effect the restoration of two million seven hundred and ninety thousand acres additional; besides which four million acres have been withheld from reservation, and the rights of entry thereon maintained.

I recommend the repeal of the pre-emption and timber-culture acts, and that the homestead laws be so amended as to better secure compliance with their requirements of residence, improvement, and cultivation for the period of five years from date of entry, without commutation or provision for speculative relinquishment. I also recommend the repeal of the desert-land laws unless it shall be the pleasure of the Congress to so amend these laws as to render them less liable to abuses. As the chief motive for an evasion of the laws, and the principal cause of their result in land accumulation instead of land distribution, is the facility with which transfers are made of the right intended to be secured to settlers, it may be deemed advisable to provide by legislation some guards and checks upon the alienation of homestead rights and lands covered thereby until patents issue.

Last year an executive proclamation was issued directing the removal of fences which inclosed the public domain. Many of these have been removed in obedience to such order; but much of the public land still remains within the lines of these unlawful fences. The ingenious methods resorted to in order to continue these trespasses and the hardihood of the pretenses by which in some cases such inclosures are justified, are fully detailed in the report of the Secretary of the Interior.

The removal of the fences still remaining which inclose public lands, will be enforced with all the authority and means with which

the executive branch of the Government is or shall be invested by the Congress for that purpose.

The report of the Commissioner of Pensions contains a detailed and most satisfactory exhibit of the operations of the Pension Bureau during the last fiscal year. The amount of work done was the largest in any year since the organization of the bureau; and it has been done at less cost than during the previous year in every division.

On the thirtieth day of June, 1886, there were 365,783 pensioners on the rolls of the bureau.

Since 1861 there have been 1,018,735 applications for pensions filed, of which 78,834 were based upon service in the war of 1812. There were 621,754 of these applications allowed, including 60,178 to the soldiers of 1812 and their widows.

The total amount paid for pensions since 1861 is \$808,624,811.57.

The number of new pensions allowed during the year ended June 30, 1886, is 40,857—a larger number than has been allowed in any year save one since 1861; the names of 2,229 pensioners which had been previously dropped from the rolls, were restored during the year, and after deducting those dropped within the same time for various causes, a net increase remains for the year of 20,658 names.

From January 1, 1861, to December 1, 1885, 1,967 private pension acts had been passed. Since the last-mentioned date, and during the last session of the Congress, 644 such acts became laws.

It seems to me that no one can examine our pension establishment and its operations, without being convinced that through its instrumentality justice can be very nearly done to all who are entitled under present laws to the pension bounty of the Government.

But it is undeniable that cases exist, well entitled to relief, in which the Pension Bureau is powerless to aid. The really worthy cases of this class are such as only lack by misfortune the kind or quantity of proof which the law and regulations of the Bureau require, or which, though their merit is apparent, for some other reason cannot be justly dealt with through general laws. These conditions fully justify application to the Congress and special enactments. But resort to the Congress for a special pension act to overrule the deliberate and careful determination of the Pension Bureau on the merits or to secure favorable action when it could not be expected under the most liberal execution of general laws, it must be admitted, opens the door to the allowance of questionable claims and presents to the legislative and executive branches of the Government applications concededly not within the law and plainly devoid of merit, but so surrounded by sentiment and patriotic feeling that

they are hard to resist. I suppose it will not be denied that many claims for pension are made without merit and that many have been allowed upon fraudulent representations. This has been declared from the Pension Bureau, not only in this, but in prior administrations.

The usefulness and the justice of any system for the distribution of pensions depend upon the equality and uniformity of its operation.

It will be seen from the report of the Commissioner that there are now paid by the Government one hundred and thirty-one different rates of pension.

He estimates from the best information he can obtain that nine thousand of those who have served in the Army and Navy of the United States are now supported, in whole or in part, from public funds or by organized charities, exclusive of those in soldiers' homes under the direction and control of the Government. Only 13 per cent. of these are pensioners, while of the entire number of men furnished for the late war something like 20 per cent., including their widows and relatives, have been or now are in the receipt of pensions.

The American people, with a patriotic and grateful regard for our ex-soldiers—too broad and too sacred to be monopolized by any special advocates—are not only willing but anxious that equal and exact justice should be done to all honest claimants for pensions. In their sight the friendless and destitute soldier, dependent on public charity, if otherwise entitled, has precisely the same right to share in the provision made for those who fought their country's battles as those better able, through friends and influence, to push their claims. Every pension that is granted under our present plan upon any other grounds than actual service and injury or disease incurred in such service, and every instance of the many in which pensions are increased on other grounds than the merits of the claim, work an injustice to the brave and crippled, but poor and friendless soldier, who is entirely neglected or who must be content with the smallest sum allowed under general laws.

There are far too many neighborhoods in which are found glaring cases of inequality of treatment in the matter of pensions; and they are largely due to a yielding in the Pension Bureau to importunity on the part of those, other than the pensioner, who are especially interested, or they arise from special acts passed for the benefit of individuals.

The men who fought side by side should stand side by side when they participate in a grateful nation's kind remembrance.

Every consideration of fairness and justice to our ex-soldiers, and the protection of the patriotic instinct of our citizens from perversion and violation, point to the adoption of a pension system broad and comprehensive enough to cover every contingency, and which shall make unnecessary an objectionable volume of special legislation.

As long as we adhere to the principle of granting pensions for service, and disability as the result of the service, the allowance of pensions should be restricted to cases presenting these features.

Every patriotic heart responds to a tender consideration for those who, having served their country long and well, are reduced to destitution and dependence, not as an incident of their service, but with advancing age or through sickness or misfortune. We are all tempted by the contemplation of such a condition to supply relief, and are often impatient of the limitations of public duty. Yielding to no one in the desire to indulge this feeling of consideration, I cannot rid myself of the conviction that if these ex-soldiers are to be relieved, they and their cause are entitled to the benefit of an enactment, under which relief may be claimed as a right, and that such relief should be granted under the sanction of law, not in evasion of it; nor should such worthy objects of care, all equally entitled, be remitted to the unequal operation of sympathy, or the tender mercies of social and political influence with their unjust discriminations.

The discharged soldiers and sailors of the country are our fellow-citizens, and interested with us in the passage and faithful execution of wholesome laws. They cannot be swerved from their duty of citizenship by artful appeals to their spirit of brotherhood born of common peril and suffering, nor will they exact as a test of devotion to their welfare a willingness to neglect public duty in their behalf.

On the 4th of March, 1885, the current business of the Patent Office was, on an average, five and a half months in arrears, and, in several divisions, more than twelve months behind. At the close of the last fiscal year such current work was but three months in arrears, and it is asserted and believed that in the next few months the delay in obtaining an examination of an application for a patent will be but nominal.

The number of applications for patents during the last fiscal year, including reissues, designs, trade-marks, and labels, equals 40,678, which is considerably in excess of the number received during any preceding year.

The receipts of the Patent Office during the year aggregate \$1,205,167.80, enabling the office to turn into the Treasury a surplus revenue, over and above all expenditures, of about \$163,710.30.

The number of patents granted during the last fiscal year, including reissues, trade-marks, designs, and labels, was 25,619—a number also quite largely in excess of that of any preceding year.

The report of the Commissioner shows the office to be in a prosperous condition and constantly increasing in its business. No increase of force is asked for.

The amount estimated for the fiscal year ending June 30, 1886, was \$890,760. The amount estimated for the year ending June 30, 1887, was \$853,960. The amount estimated for the fiscal year ending June 30, 1888, is \$778,770.

The Secretary of the Interior suggests a change in the plan for the payment of the indebtedness of the Pacific subsidized roads to the Government. His suggestion has the unanimous endorsement of the persons selected by the Government to act as directors of these roads and protect the interests of the United States in the board of direction. In considering the plan proposed the sole matters which should be taken into account, in my opinion, are the situation of the Government as a creditor, and the surest way to secure the payment of the principal and interest of its debt.

By a recent decision of the Supreme Court of the United States it has been adjudged that the laws of the several States are inoperative to regulate rates of transportation upon railroads, if such regulation interferes with the rate of carriage from one State into another. This important field of control and regulation having been thus left entirely unoccupied, the expediency of Federal action upon the subject is worthy of consideration.

The relations of labor to capital and of laboring men to their employers are of the utmost concern to every patriotic citizen. When these are strained and distorted, unjustifiable claims are apt to be insisted upon by both interests, and in the controversy which results, the welfare of all and the prosperity of the country are jeopardized. Any intervention of the General Government, within the limits of its constitutional authority, to avert such a condition, should be willingly accorded.

In a special message transmitted to the Congress at its last session I suggested the enlargement of our present Labor Bureau and adding to its present functions the power of arbitration in cases where differences arise between employer and employed. When these differences reach such a stage as to result in the interruption of commerce between the States, the application of this remedy by the General Government might be regarded as entirely within its constitutional

powers. And I think we might reasonably hope that such arbitrators, if carefully selected and if entitled to the confidence of the parties to be affected, would be voluntarily called to the settlement of controversies of less extent and not necessarily within the domain of Federal regulation.

I am of the opinion that this suggestion is worthy the attention of the Congress.

But after all has been done by the passage of laws either Federal or State to relieve a situation full of solicitude, much more remains to be accomplished by the reinstatement and cultivation of a true American sentiment which recognizes the equality of American citizenship. This, in the light of our traditions and in loyalty to the spirit of our institutions, would teach that a hearty co-operation on the part of all interests is the surest path to national greatness and the happiness of all our people, that capital should, in recognition of the brotherhood of our citizenship and in a spirit of American fairness, generously accord to labor its just compensation and consideration, and that contented labor is capital's best protection and faithful ally. It would teach, too, that the diverse situations of our people are inseparable from our civilization, that every citizen should, in his sphere, be a contributor to the general good, that capital does not necessarily tend to the oppression of labor, and that violent disturbances and disorders alienate from their promoters true American sympathy and kindly feeling.

The Department of Agriculture, representing the oldest and largest of our national industries, is subserving well the purposes of its organization. By the introduction of new subjects of farming enterprise, and by opening new sources of agricultural wealth and the dissemination of early information concerning production and prices, it has contributed largely to the country's prosperity. Through this agency, advanced thought and investigation touching the subjects it has in charge, should, among other things, be practically applied to the home production at a low cost of articles of food which are now imported from abroad. Such an innovation will necessarily of course in the beginning be within the domain of intelligent experiment; and the subject in every stage should receive all possible encouragement from the Government.

The interests of millions of our citizens engaged in agriculture are involved in an enlargement and improvement of the results of their labor; and a zealous regard for their welfare should be a willing tribute to those whose productive returns are a main source of our progress and power.

The existence of pleuro-pneumonia among the cattle of various States has led to burdensome and in some cases disastrous restrictions in an important branch of our commerce, threatening to affect the quantity and quality of our food supply. This is a matter of such importance and of such far-reaching consequences, that I hope it will engage the serious attention of the Congress, to the end that such a remedy may be applied as the limits of a constitutional delegation of power to the General Government will permit.

I commend to the consideration of the Congress the report of the Commissioner, and his suggestions concerning the interest intrusted to his care.

The continued operation of the law relating to our Civil Service has added the most convincing proofs of its necessity and usefulness. It is a fact worthy of note that every public officer who has a just idea of his duty to the people, testifies to the value of this reform. Its staunchest friends are found among those who understand it best, and its warmest supporters are those who are restrained and protected by its requirements.

The meaning of such restraint and protection is not appreciated by those who want places under the Government, regardless of merit and efficiency, nor by those who insist that the selection for such places should rest upon a proper credential showing active partisan work. They mean to public officers, if not their lives, the only opportunity afforded them to attend to public business, and they mean to the good people of the country the better performance of the work of their Government.

It is exceedingly strange that the scope and nature of this reform are so little understood, and that so many things not included within its plan are called by its name. When cavil yields more fully to examination the system will have large additions to the number of its friends.

Our Civil-Service reform may be imperfect in some of its details; it may be misunderstood and opposed; it may not always be faithfully applied; its designs may sometimes miscarry through mistake or willful intent; it may sometimes tremble under the assaults of its enemies or languish under the misguided zeal of impracticable friends; but if the people of this country ever submit to the banishment of its underlying principle from the operation of their Government, they will abandon the surest guarantee of the safety and success of American institutions.

I invoke for this reform the cheerful and ungrudging support of the Congress. I renew my recommendation made last year that the

salaries of the Commissioners be made equal to other officers of the Government having like duties and responsibilities, and I hope that such reasonable appropriations may be made as will enable them to increase the usefulness of the cause they have in charge.

I desire to call the attention of the Congress to a plain duty which the Government owes to the depositors in the Freedman's Savings and Trust Company.

This company was chartered by the Congress for the benefit of the most illiterate and humble of our people, and with the intention of encouraging in them industry and thrift. Most of its branches were presided over by officers holding the commissions and clothed in the uniform of the United States. These and other circumstances reasonably, I think, led these simple people to suppose that the invitation to deposit their hard-earned savings in this institution implied an undertaking on the part of their Government that their money should be safely kept for them.

When this company failed it was liable in the sum of \$2,939,925.22 to 61,131 depositors. Dividends amounting in the aggregate to sixty-two per cent. have been declared, and the sum called for and paid of such dividends seems to be \$1,648,181.72. This sum deducted from the entire amount of deposits leaves \$1,291,744.50 still unpaid. Past experience has shown that quite a large part of this sum will not be called for. There are assets still on hand amounting to the estimated sum of \$16,000.

I think the remaining thirty-eight per cent. of such of these deposits as have claimants should be paid by the Government, upon principles of equity and fairness.

The report of the Commissioner, soon to be laid before Congress, will give more satisfactory details on this subject.

The control of the affairs of the District of Columbia having been placed in the hands of purely executive officers, while the Congress still retains all legislative authority relating to its government, it becomes my duty to make known the most pressing needs of the District and recommend their consideration.

The laws of the District appear to be in an uncertain and unsatisfactory condition, and their codification or revision is much needed.

During the past year one of the bridges leading from the District to the State of Virginia became unfit for use, and travel upon it was forbidden. This leads me to suggest that the improvement of all the bridges crossing the Potomac and its branches, from the city of Washington, is worthy of the attention of Congress.

The Commissioners of the District represent that the laws regulating the sale of liquor and granting licenses therefor should be at once amended, and that legislation is needed to consolidate, define, and enlarge the scope and powers of charitable and penal institutions within the District.

I suggest that the Commissioners be clothed with the power to make, within fixed limitations, police regulations. I believe this power granted and carefully guarded, would tend to subserve the good order of the municipality.

It seems that trouble still exists growing out of the occupation of the streets and avenues by certain railroads having their termini in the city. It is very important that such laws should be enacted upon this subject as will secure to the railroads all the facilities they require for the transaction of their business, and at the same time protect citizens from injury to their persons or property.

The Commissioners again complain that the accommodations afforded them for the necessary offices for District business, and for the safe keeping of valuable books and papers, are entirely insufficient. I recommend that this condition of affairs be remedied by the Congress, and that suitable quarters be furnished for the needs of the District government.

In conclusion, I earnestly invoke such wise action on the part of the people's legislators, as will subserve the public good and demonstrate during the remaining days of the Congress as at present organized, its ability and inclination to so meet the people's needs that it shall be gratefully remembered by an expectant constituency.

GROVER CLEVELAND.

WASHINGTON,

December 6, 1886.

REPORT

OF

THE SECRETARY OF THE TREASURY.

TREASURY DEPARTMENT,
Washington, December 6, 1886.

SIR: In compliance with Section 257, Revised Statutes, I herewith report to Congress (Appendix A) "estimates of the public revenue and public expenditures for the fiscal year current;" with an exhibit (Appendix B) of the receipts and expenditures for the last fiscal year; and a statement of the public indebtedness and of the assets and liabilities of the Treasury on November 1, 1885, and November 1, 1886, and of the payments and changes of the funded debt during the same twelve months; besides other tabular statements, records, and comparisons, and the annual reports to me (Appendix I) from the heads of bureaus and other officers in this Department.

In compliance with Section 248, Revised Statutes, I have also endeavored to "digest and prepare plans for the improvement and management of the revenue, and for the support of the public credit," thereto allotting the time which recovery from a tedious illness obliged me to withhold from official routine.

THE SILVER QUESTION.

Since the date of my last annual report, the attitude of an important government toward the silver question has been changed. The matter is of consequence, and requires detail.

Last December the results of our special mission to the governments of France, Germany, and Great Britain had just been obtained, and were as follows:

The French Government remained of the same mind as when it had united with the Government of the United States in calling the International Monetary Conference of 1881. The German Government deemed the co-operation of Great Britain in any change a *sine qua non*. The Government of Great Britain, administered by the same party and principal persons then as now, saw no reason to depart from the position held by that Government at the International Monetary Conferences of 1878 and 1881.

The position which the delegates of the British Government were instructed to take at each of those conferences had been adverse to the

object sought by the United States. That object was the opening of the mints of the governments of the United States of America and of the leading European States to the free coinage of both gold and silver into unlimited legal-tender money at a ratio fixed by international agreement.

Thus, at the International Monetary Conference of 1878, the British delegates had led Mons. Leon Say, the first French delegate, and a majority of the conferees, to declare that silver, like gold, of course, must be kept a monetary metal, but each State or group of States must act for itself in the choice and the minting. An international ratio being pronounced undebatable since the bimetallic States did not undertake an unlimited coinage of silver, the British delegates further declared their hope that every State would not prefer gold, while insisting upon Great Britain keeping to her own preferences, and that a fixed ratio was "utterly impracticable." These declarations, of course, frustrated the object of the United States in calling the International Monetary Conference of 1878.

During the next three years, the powerful polemic of Mons. Henri Cernuschi revolutionized the opinion of leading men in Europe, and terminated the dependence of France upon Great Britain. The Government of France joined the Government of the United States in calling the next International Monetary Conference, held at Paris in 1881. The object of the United States, now supported by the invaluable concurrence of "the greatest among the great metallic powers," was again the same—the opening of the mints of a group of such powers to the free coinage of gold and silver, at a ratio fixed by international agreement, into unlimited legal-tender money. The delegates for Great Britain declared that their monetary system since 1816 had rested on gold as a single standard; that this system had satisfied all the needs of the country without giving rise to the difficulties manifest elsewhere under other systems, and for these reasons it had been accepted by the governments of all parties and by the nation. The Government of Great Britain, therefore, could not take part in a conference as supporting the principles proposed, and her delegate was not permitted to vote. This declaration, of course, frustrated the object in assembling the International Monetary Conference of 1881, for the Government of Germany, following the lead of Great Britain, was resolved to retain a monetary system like hers.

I am informed by the Secretary of State that the above declaration of 1881, in respect to the support given by the Governments of all parties to the present monetary system of Great Britain, was in the summer of 1885

reiterated to our special commissioner, Mr. Manton Marble, not more clearly by the highest officials than by the most eminent characters of the opposite party who had just resigned the seals of office. In January of the present year, however, before the return of those opponents to office, a correspondence was opened between two departments of the British executive, (by the India office with the Treasury,) which marked the point of a new departure.

NEW GOLD AND SILVER COMMISSION IN GREAT BRITAIN.

The first letter from the then Secretary of State for India ended as follows :

“Lord Randolph Churchill * * * desires at the same time most earnestly to press upon my Lords the importance of making every endeavor that is possible to bring about, by international agreement, some settlement of the question how the free coinage of silver may be revived, and the comparative stability of the relative value of gold and silver, which is so essential for the regular course of trade, and which is of vital importance to India, may be secured.”

This urgency was supported by a telegram from the Government of India, saying :

“We are of opinion that the interests of British India imperatively demand that a determined effort should be made to settle the silver question by international agreement. Until this is done, we are drifting into a position of the most serious financial embarrassment, in regard to the consequences of which, not only as regards our financial position, but in respect of measures of taxation in relation to our rule in British India, it is impossible not to be seriously apprehensive.”

The rejoinder (May 31) of the Treasury, then for a brief while under the direction of Mr. Gladstone's government, maintained the position traditional in both parties, supporting the same by the authority of Lord Randolph Churchill's associate and predecessor, Sir Stafford Northcote, and closing as follows :

“It is obvious that her Majesty's Government could take no measures for summoning or co-operating in a new monetary conference until they had previously determined what policy they should initiate or consent to. The whole subject is understood to be under consideration of the Royal Commission on the Depression of Trade, but my Lords can find nothing in the correspondence and information before them which should induce them to depart from the instructions given to the representative of this country at the conference of 1881.”

The third report, last summer, of the said Royal Commission, of which Lord Iddesleigh (Northcote) is chairman, after reference to every cause for the changed relative value of the two metals, except the first cause, to which I shall presently allude, ended by recommending a special gold and silver commission.

By the return of the Tory party to power in the elections of July, that recommendation fell into the hands of those who had made it. In September, the Royal Gold and Silver Commission was created, as a petition signed by 243 members of the House of Commons had requested that it should be,

“To inquire whether it is possible to suggest any remedies within the power of the legislature or the Government *by itself or in concert with other powers*, which would be effectual in removing or palliating the evils or inconveniences thus caused, without injustice to other interests and without causing other evils or inconveniences equally great. Lastly, if the commission are of opinion that this is possible, they should state the precise form which such remedies should take, and the manner in which they should be applied.”

But the return of the Tory party to power was signalized by a new distribution of cabinet offices. The First Lord of the Treasury (Iddesleigh) and the Chancellor of the Exchequer, (Hicks-Beach,) who had successively held the leadership of the House of Commons, and whose opinions had been cited by Mr. Gladstone's government for a rebuke to the India Office, were translated to other functions: whereas the former Secretary of State for India, who, in January, had urged every endeavor for an international agreement to revive the free coinage of silver, took the chancellorship of the exchequer and the leadership of the House of Commons. In that place and office Lord Randolph Churchill announced, on the 7th of September, the members of the Gold and Silver Commission. Its chairman, a vice-president of the Bi-metallic League, and one of its expert members, the financial secretary of the Government of India, are known by those who concern themselves with the views of thinkers on this subject, to share in the belief that an international agreement to open the mints of leading governments to the free coinage at a fixed ratio of both gold and silver into unlimited legal-tender money would suffice to restore the relative value of the two metals to their old stability.

Whatever may be the conclusions of this commission, whatever the prosperity of those conclusions with cabinets or parliaments, its appointment and character mark a change in the attitude of the British Government toward that belief, at least from indifference to considerate attention. The change is important. Nevertheless, weighty are the words of Mr. Gladstone's government, reiterated last May: “An entire change in public opinion must take place before a change of monetary policy in this country could be seriously contemplated.” While men of light and leading may strive to form public opinion in a matter of critical importance to the general prosperity, but so recondite that not one Englishman in a hundred thousand is capable to form a judgment

on it, and so repellent that not half the capable will try, yet, even for agreement among the competent, silence among the incompetent, and faith among the masses, time will be necessary. Moreover, in Great Britain as elsewhere, it has been the fashion to discredit, as the mere schemes of currency-mongers or of ignorant inflationists, a bimetallic theory of money long prevalent in the successful practice of nations, but which owes both its scientific statement and authority to a generation later than that which could but conceive an Anglo-centric monetary system. Apart from prejudice, wont and use will make it difficult, like the change to the modern theory of the planetary movements, for a generation born and bred since 1816 to interpret the function of money from a universal instead of an insular point of view.

I am, therefore, far from supposing that the recent heavy fall of silver compared with gold, and its effects upon Indian finance and English trade, have dispelled an illusion prevalent in Great Britain for seventy years, or that the changed attitude of her present Government amounts to a candid confession that the act of a British Parliament in 1816 was the fount and origin of the present great disturbance of the monetary peace of the world, which her persistence in error has aggravated and prolonged.

THE BRITISH GOLD-STANDARD ILLUSION—ORIGIN OF THE MONETARY DISLOCATION.

The illusion consists in seeing the standard measure of commodity-prices throughout Great Britain, in the gold exclusively coined by her mints, instead of in the silver and gold of the world.

The illusion is extraordinary, for it has not been denied by her greatest economists that prices are an expression (in terms of any national monetary unit embodied in coin) of the relation between the quantities of the two metals and of commodities. Nor has it been imagined that London prices expressed the relation between the quantities of gold only and of commodities, Calcutta prices the relation between the quantities of silver and of commodities, Paris prices the relation, on a third and different scale, between the quantities of the two metals and of commodities. The fact, too, is apparent, that prices are one, though expressed in many languages—the language of each nation's monetary unit, which unit may here be embodied in gold alone, or there in silver alone, or elsewhere in both silver and gold, in pounds sterling, dollars, rupees, francs, marks.

Nevertheless, it is supposed that in 1816 Great Britain did have a choice among standards, got the best, and, holding up the same by

her independent act and authority ever since in her world-wide commerce, that gold alone has been her standard measure of prices, "satisfying all her needs without giving rise to the difficulties manifest elsewhere among other systems."

What Great Britain did by the act of 1816 was to close, then and thereafter, her mints to the free coinage of silver into full legal-tender money, leaving them open for the free coinage of gold alone into full legal-tender money.

In fact, Great Britain's monetary standard, then as before and thereafter, which measured and scored all commodity-prices for herself and the trading nations of both hemispheres, consisted of all the gold and silver of the world. Its prevalence was in this wise: one nation or more gave free coinage to silver alone into full legal-tender money, another nation or more gave free coinage to gold alone into full legal-tender money, another coined both metals into full legal-tender-money, and, fixing the different weights of the two metals which should have the same debt-paying and purchasing power, kept in use so large coined stocks of both as to make her ratio prevalent. Gold, therefore, had in its proportion as much paying power wherever silver alone had free coinage as where both were coined. Silver, therefore, had in its proportion as much purchasing power where gold alone had free coinage as where both were coined. The two metals were thus joined practically in a universal money, and the general range of prices which it measured was identical, other things being equal, in Great Britain and elsewhere. In other words, the silver coinage which England shirked in 1816 was elsewhere done; the free coinage at a fixed ratio into full legal-tender money, which she had previously proffered, both to all the gold and all the silver anywhere mined or melted, was elsewhere actively maintained for sixty years. She neither had a different standard nor a single gold standard; she was merely a factor in the general equilibrium of monometallic coinages, which France, by a bimetallic coinage, had power to keep stable. The dependence of Great Britain was absolute at the time her independence was most vaunted.

Thus Great Britain's exclusion of silver from mintage into unlimited legal-tender money in 1816 did not at once promote the disuse of that metal in international transactions, not even those in which her merchants and bankers were themselves concerned; nor did it disturb the ratio of weight at which the two metals were given and received as of equal value; nor did it affect that range of prices, the resultant of the world's industries and exchanges measured against the extant aggregate of the two monetary metals, so long as great mints were elsewhere open

and ready to coin both into money that was equally a lawful tender in fulfilment of every contract or payment of debt created in the daily course of those industries and exchanges; nor until 1873 did Great Britain's pursuit of an illusory standard finally disclose its pregnant mischief.

CRISIS AND COURSE OF THE MONETARY DISLOCATION.

The mischief pregnant in Great Britain's silver boycott of 1816 leaped to light when Germany, in 1873, imitated that imperial blunder. Of the growth of British commerce, one uninfluential circumstance, one mere concomitant (her exclusion of silver from mintage into full legal-tender coins) was deemed a cause. Called by the illusory name of the single gold standard, vaunted by Great Britain herself as "a monetary system under which she has enjoyed much prosperity," and thus accredited as a partial secret of the greatness of her commercial empire, it obtained the admiration of a rising power, then more exercised in the military than the industrial arts, and but recently consolidated into political unity after a gigantic war. Equipped with the ransom paid into the Imperial Treasury by a rich but vanquished power, the statesmen of Germany determined, at any cost, to possess her of the gold fetich.

Closing her mints to the further coinage of silver, retiring from circulation her silver theretofore exclusively coined and seeking to effect its substitution through the open mints of France for the gold of France, throwing large quantities of silver upon the English market at short intervals and in unknown amounts for sale, Germany, by her legislation of 1871-'73 thus conceived in the likeness of Great Britain's legislation of 1816, and, together therewith, immediately caused a great monetary disturbance.

France, in presence of the silver flood from Germany, distrusted the power of her open mints alone to maintain the ratio of the two metals under free coinage of both, as almost alone she had done during the immensely greater inundation of gold from the new mines of California and Australia; and first restricting her mintage, (which neither defeated the purpose of Germany, as prompt closure would have done, nor deprived it of importance as continued free coinage would have done,) at last closed her mints altogether to the further free coinage of silver for the public into money of unlimited legal tender; and thus, at last, was subverted the monetary peace of the world.

Since that date, nowhere in the world has the mint of any great government, which coined either metal into full legal-tender money, coined the other metal into full legal-tender money at any ratio.

Thus was ended for a time that legal fusion, so to speak, of the two metals into one monetary measure, which the free coinage of both, and the legal-tender quality imparted to both in a fixed ratio, had made a practically complete fusion.

Thus was ended the prevalence of an ancient acceptable bimetallic standard and measure of commodity-prices—the mass of the two monetary metals, fused by free coinage, a fixed ratio, and the full legal-tender power, into one metal money and price-measurer.

Thus began the confusion of two unconjoined monometallic measures, throughout a world all knit together in commercial unity.

Thus began the great monetary dislocation.

Displaced for a time was the world's normal use of one common standard of prices. The superiority of gold and silver joined, as a thing in kind and amount, of all things best suited to be that standard, appears, as I have said, "first, in this, that it is an amount not to be varied by legislative wisdom; second, that it is an amount not to be considerably varied by any single generation of men, for that the annual increment is too small in proportion to the total mass, already huge, which slowly grows from age to age. That total mass, by its hugeness, its invariableness, its indestructibility, is a miracle among measures. Standing over against the vast aggregate of human commodities, mostly perishable, which sinks and swells with seed-time and harvest as the seasons change, and of which the unconsumed and more or less imperishable part is so small, the monetary metals of the world are the most trustworthy attainable measure of value."

What has followed that displacement? Beginning in 1873 and continuing through minor fluctuations until now, there has been a demonstrated fall in the prices of the chief marketable commodities of man's use more than countervailing the demonstrated rise of prices, from 1848 to 1865, which followed the addition of \$1,900,000,000 to the world's previous stock of gold.

Gold being merchandise in countries giving free coinage into unlimited legal-tender money to silver alone, and silver being merchandise in countries giving free coinage into unlimited legal-tender money to gold alone, and the fixity of price of either metal thus having ceased (becoming as impossible as fixity of price for wheat or iron) in any country where the other metal alone has free coinage, it has also occurred that the price of silver, measured by the same measure as the falling prices of commodities since 1873, has fallen in closely parallel or following fluctuations as far. (Appendix C.)

CONDITIONS OF MONETARY ORDER.

The essential conditions of that old monetary order in their last analysis seem to be these:

1. Mints open to the public for the free coinage of gold.
2. Mints open to the public for the free coinage of silver.
3. Coined gold a full legal tender.
4. Coined silver a full legal tender.
5. Mints open to the public for the free coinage of silver and of gold.
6. Rated equivalence of both metals in such coinage, fixed by States powerful enough to make and keep it prevalent.

These conditions, it is obvious, operate everywhere the inclusion of the uncoined metals as potential money with the coined metals as actual money,—enlarging the great measure. They render more than trivial, they nullify any variations in the petty increment from the mines, or in the pettier decrement from abrasion, loss, or non-monetary uses. They enable us to map past errors with precision, and to test the policy of steps by any nation toward a restoration of the monetary order.

These joint conditions were the security that changes in prices should be due for every commodity to special and natural causes, and not a monetary cause, and should be due to no change in the whole monetary measure or unit of measure, but in every case to the varying cost of production as man's inventions and industries more easily subdued the matter and the forces of nature, or to other such secular and intrinsic circumstance of fluctuation.

Obviously these conditions would have been violated by adoption of the proposal of Chevalier and Cobden. Had the right of free monetization been withdrawn from the owners and miners of gold as it has been recently withdrawn from the owners and miners of silver by nations previously giving the right to both, it must be believed that the purchasing power of gold compared to that of silver would have been similarly diminished, and that, instead of a silver question, a gold question would now be perplexing legislatures and statesmen. In either event, there could but be a world-wide monetary dislocation, causing ever-falling prices and a long depression of trade.

These joint conditions of the existence as of the restoration of the monetary order exhibit in a befitting light the main features of our own monetary history, and the debates which have raged around "demonetization" and the acts of 1873 and 1878.

UNITED STATES MONETARY HISTORY—ACTS OF 1873 AND 1878 ALIKE
AND IRRELEVANT.

The act of 1873, we are told, "demonetized" the standard silver dollar; the act of 1878, we are told, remonetized it; and that, we are told, is the whole of the matter.

In fact, those two acts are so nearly identical that a common authorship might be suspected. The fate is odd which apportions blessing and cursing inversely to both.

The act of 1873 has been denounced and praised for demonetizing silver, which it did not do. It retired no silver coin from circulation. It caused no coin to be sold as bullion. It withdrew the full legal-tender quality from no silver coined. It did limit monetization to Treasury purchases for fractional coin.

The act of 1878 has been praised and denounced for remonetizing silver, which it did not do. It did limit monetization to Treasury purchases for non-fractional coin.

The act of 1873 took a sure way to keep all our fractional silver coin at home.

The act of 1878 took a sure way to keep all our non-fractional silver coin at home.

The two acts are also alike in missing the point of the monetary difficulty and escaping detection of their own true character. The act of 1878 is only singular in both mistaking the true object and also missing what it aimed at.

The method of the two acts is identical. Exportation would only be possible at a loss on the silver coined under either act. In both acts monetization is denied except to Treasury purchases.

The door of the Mint is shut to the public by both acts.

Both acts are innocent of a share in causing the monetary dislocation, although the act of 1878 helps to prolong it.

In 1873 we had not escaped the paper-money plague, and our resumption of the use of the two metals and current redemption of paper did not begin till the monetary dislocation was far advanced.

By the act of 1878 the monetary dislocation could be neither caused nor cured. Its limited monetization since 1878 has absorbed more silver than the total amount demonetized by Germany since 1873. It does not counteract the monetary dislocation. The monetary stock of the four leading powers, who all in 1878 had neither too much nor less than enough, is now greater than then by the aid of the United States,—thus confuting the money-famine theories. Still it does not redress the monetary dislocation.

The action of the United States in 1834, changing the ratio from 15 to 16, had forestalled the act of 1873. To open our mints for the coinage of silver at 16 to 1 of gold, while France was coining silver at 15½ to 1 of gold, was, so to say, equivalent to closing our mints to the coinage of silver at all. Two ratios cannot live together face to face, as Sir Isaac Newton, master of the Mint, explained nearly two centuries ago. In the money world from that year the United States became a gold monometallic power, and such they have ever since remained, both when they did intend to and when they did not. Albert Gallatin was, perhaps, the only man in the United States at that time competent to give advice upon a ratio or coinage difficulty, and Congress rejected his advice. But the error of the United States was the outcome of ignorance, not, like Great Britain's error, the outcome of an illusion also; and 1834 was the date, not at which cis-Atlantic demonetization of silver began, but the date at which its monetization was nullified by an ill-judged ratio. The arguments that anything newly injurious to silver was done by the act of 1873, are arguments offered only by those who are not quite familiar with their subject. The act of 1878 is public confession that by the closure of the French mint to the free coinage of silver, our act of 1873, not then a necessity, was become a necessity in that particular, and so was never repealed, but merely enlarged and confirmed. It was enlarged by adding to discretionary Treasury purchases of silver for the mintage of fractional coin, compulsory Treasury purchases of silver for the mintage of non-fractional coin. It was confirmed on the point of withholding free coinage of silver.

Our whole monetary history, bearing always the marks of good faith, is not less instructive. It may be comprised in four chapters:

1. 1792 to 1834, when we had a plenty of silver, but managed by act of Congress (April 2, 1792) to shunt all our gold into European mints.

2. 1834 to 1862, when we had a plenty of gold, but managed by another act of Congress (July 31, 1834) to shunt all our silver into European mints.

3. 1862 to 1878, when, by three acts of Congress, (February 25 and July 11, 1862. and March 3, 1863,) except the gold required for customs taxes, we managed to shunt both our gold and silver abroad.

4. 1878 to date, when, by act of Congress (February 28, 1878) we have managed to dam up the major part of our silver product against the possibility of exportation.

EFFECT ON COINAGE, OF LEGAL-TENDER FUNCTION.

The enhancement in value of both metals, due to their general employment as legal-tender money, is great, though immeasurable. That

enhancement in large degree survives the monetary dislocation which consists in the disjoining of the two metals, one or the other of them being now mere merchandise in every country in the world. For while no nation or group of nations possessing a sufficient stock of both metals now conjoins the two moneys into one money by the free coinage of both metals at a fixed ratio into one common purchasing power and price-measurer, as they were long conjoined, silver still has free coinage into full legal-tender money in India, Central and South America, gold still has free coinage into full legal-tender money in Europe and here. The enhancement of one metal is sometimes decried by those who overlook their own share in the enhancement of the other. In England, official warnings as to the "results of any attempt artificially to enhance the gold price of silver" have been spoken and thought logical, as if some such impossibility were attempted as putting up permanently the gold price of wheat or some other article of mere merchandise.

It was affirmed by Mr. Gladstone's government in 1881 that "it has been the policy of this country to emancipate commercial transactions as far as possible from legal control, and to impose no unnecessary restrictions upon the interchange of commodities. To fix the relative value of gold and silver by law would be to enter upon a course directly at variance with this principle, and would be regarded as an arbitrary interference with a natural law not justified by any pressing necessity." Too much honor cannot be rendered to the principle, but here it is not fairly in question. Prior to 1816, Great Britain had always fixed the relative value of gold and silver by law, and in 1816 entered upon a course in which, being joined in 1873 by Germany, the outcome was the subversion of their ancient, fixed, and prevalent relative value in law, which must be at least as objectionable as fixing it anew—a course that meanwhile continued to enhance the value of one of the metals in relation to all commodities, which must be as "arbitrary" as interfering with the relative value of the two metals to one another. The "natural law" should be named and described, if possible, which underwent no "arbitrary interference" when England made of gold alone a legal-tender metal in 1816, and of silver alone a legal tender metal in India in 1834, but which would not escape "arbitrary interference" if now, as before 1816, both gold and silver were to be enhanced in current use and value by laws of Great Britain conferring in accord with other nations upon both metals when coined the quality of being a legal tender in payment of debt.

THE SILVER TROUBLE UNIVERSAL—REMEDY INTERNATIONAL.

That "constitutions grow and are not made" has no better illustration in the history of our civilization than this unconscious growth and uncontrived accordance of human societies, imperfect yet effectual, in the founding, and keeping fairly stable a general legal-tender money. It was not born of philanthropy, nor cradled in treaties. It is the growth of centuries out of that increasing commerce between all the races of mankind, which is slowly but surely, more than all political contrivances, establishing their union, enlarging their freedom, and promoting their peace. To this character of its origin and growth I recur, because it may justify the opinion which I entertain, that a joint agreement to open mints would so soon vindicate its own sufficiency and prove to be the interest of every concurring power, as to abolish under this head every fear or need of "entangling alliances." It was a natural and unforced constitution of the world's monetary system which the unwise laws of a few separate nations have sufficed to dislocate and disorder, and which wiser laws by accordant nations may now restore. Once restored, the conditions of a subsequent dislocation, even if attempted as a weapon of deliberate war against one member of the group, will be found upon reflection almost inconceivable, and in any event suicidal.

Compliance with the duty imposed by law upon the head of this Department would have been defective, it will now be seen, had I ever regarded the subject thus far discussed as one of sectional or national limits, or such as usually occupy the time and tax the energies here devoted to the public service. It is of larger scope. Not by our choosing, nor by anybody's choosing, it is an international question. Nor can we safely shut from the range of our scrutiny and reflection, besides the policies and interests of foreign States, the semi-civilized and most numerous races of men, whose continuous absorption of silver for centuries, their more recent and increasing absorption of gold, (of which \$125,000,000 have been received and retained in India alone during seven recent years,) are factors to be duly weighed, and the chances of change. It is this monetary dislocation of the world in which our own silver question is included as an inseparable though fractional part, and in which even our surplus problem is deeply enmeshed.

Most watchful care and prudence can alone safeguard the interests of our beloved land and people.

Careful perusal of the instructive debates at the last session of Congress leads me to review the four policies which then received marked attention.

1. Free coinage of silver.
2. Conferences.
3. Continued purchases of silver.
4. Stopping purchases of silver.

SHALL THE UNITED STATES GIVE FREE COINAGE TO SILVER NOW?

I. The free-silver-coinage prescription for the monetary dislocation satisfies but one of the several indispensable conditions which I have set forth above in full detail. While it is an indispensable condition of permanent restoration that the free monetization of silver shall be equally complete as of gold, yet were it now given to silver in this actual moment of dislocation, the practical result would be to withdraw the same from gold. That would be a change without advantage in any respect, and in every respect with disadvantage. In the first place, it would bring us to the Asiatic silver basis. This has been commended in some quarters. There is, however, no such public desire. The preponderance of public opinion seems overwhelming in favor of the joint use of both metals. No party and no administration could survive or would deserve to survive the deliberate or the unforeseen and unprevented change to a silver basis. But the proof is simple that the free coinage of silver now, would at once entail a silver basis. Offered by the open mint to both metals, free coinage of silver for silver-owners into legal-tender dollars would stop the use of the mint for free coinage of gold by gold-owners. It would stop the simultaneous circulation of gold and silver dollars. The gold dollar would be at a premium, and be exported. Throughout the United States it would make the use of silver in legal-tender payments exclusive, apart from the greenbacks, which would first be used if possible to empty the Treasury of gold, and then would cease to signify by "dollar" anything else than the debt of a silver coin—not at all the monetary unit once embodied in equivalent coins of the two metals.

Thus the free coinage of silver now, or, what is the same thing, the Asiatic silver basis, would but shift our lameness to the other foot. It would neither restore nor tend to restore the world-wide use of the two metals in a rated equivalence, which is the cure for the monetary dislocation, as their disjoined use has been its cause. But the change to the other foot would be disadvantageous, not a matter of indifference. Now we make a limping use of both metals, as is possible since the difficulty

is with respect to the less precious metal, which we manage, by the legal-tender power and the receipt for taxes, to hold in some general use along with the other. Then, however, we could keep in use but one, not the two,—not even by legal-tender laws, or penal laws. Thus the free-silver-coinage prescription and the silver-basis prescription are alike—amputation of an uninjured leg to cure temporary lameness in the other.

Avoiding repetition of what I had the honor to say last winter in reply to the inquiries of the House of Representatives, (see Appendix H,) I will add but one suggestion, which should be fatal to the free-silver-coinage proposal. As our limited silver coinage paralyzes, so our free silver coinage at this moment would destroy, the power of the United States to promote the restoration of silver to its old and equal place in the monetary order.

SHALL THE UNITED STATES PROPOSE MORE CONFERENCES?

II. More conferences, further diplomatic correspondence are proposed. I venture to think, with all due deference to those who are responsible for a decision; that the time for another conference has not arrived, and that the moment for diplomatic interference is not perfectly felicitous. Our information is recent and authentic, and is contained (Senate Ex. Doc. No. 29) in the letters of our ministers accredited to Great Britain, France, and Germany, there published, and in the correspondence and action of the English Government which are summarized above.

The continental powers await the action of Great Britain, whose reluctance defeated the object of both conferences called at the instance of the United States, and to whom again, almost within a twelvemonth, she has turned a deaf ear. If it suited the dignity of the United States again to besiege the attention of European States, or again to make advances where they have been so lately repulsed, it would not suit our interests so to do when it is certain that the inquiry upon which Great Britain has suddenly entered at the instance and insistence of her great dependency, India, and of her own accord, is entered upon with an exclusive regard to her own interest. And of Great Britain's interests the United States have no call to become advisers or guardians. A considerable chapter in the record of both the monetary conferences is occupied by disclaimers, on the part of the United States, of any special or interested views,—disclaimers not more just in fact, than they are convincing, by their necessity, of the natural distrust which zeal may inspire among jealous and equal States. No interference now can advance its object if an inward change indeed be taking place where

outward change has been so long persistently refused and resisted. A conference will be profitable not until after any reluctant State has placed herself in substantial accord with former conferees whose concurrent purpose she has long known and twice frustrated. In short, it is now for Great Britain to make propositions to other powers. And, as not at the instance of united powers, so not at the instance of any one of them, will she abandon her cherished isolation. It will be abandoned, if ever, solely because it is generally perceived in Great Britain to concern the vital interests of Great Britain so to do. Under no circumstances will Great Britain alone open her mint to the free coinage of silver. When, if ever, she perceives her interest to lie in retracing the error of 1816, she has the means of apprising other powers of a change in her opinions.

Conferences and treaties would then be in order to a practical result.

SHALL THE UNITED STATES BUY MORE THAN \$250,000,000 OF SILVER?

III. To go on as we are is the least creditable of all the courses open to our choice.

The Treasury silver purchase is defended by nobody, approved by nobody; even every vote for the free coinage of silver is a vote that the Treasury silver purchase shall cease, an assertion that it ought to cease.

It has thrown away the opportunity to let loose abroad the silver we have kept, stamped and stored, and it has discarded the power to reduce by as much the foreign stocks of gold, two arguments that would have had an intelligible cogency.

It is a policy which, if now prolonged by our hopes, may easily be so protracted thereafter by astute delays and dilatory proceedings and by the time taken for negotiation itself as to force an Asiatic silver basis for America.

It is thus, at least, the remission of all control of the silver question to adverse, if not to hostile, interests.

It deprives the United States of perfect equality of position (non-coinage) in negotiation with foreign powers.

It is an expense and a taxation demonstrated by experience to be of no avail for any useful end. Needless as a tax, our silver purchase is also a disturbance in the Treasury, which threatens the currency without relieving the tax-payer. It is heaping up a heavy load of silver coin needing to be kept, but increasingly difficult to keep, in domestic commercial equivalence with our monetary unit. Of that unit the silver coins can never be a true embodiment as the gold coins are, by any other means than those which preserve to the gold coin its function as

such an embodiment, viz., open mints to the silver of the world and a full legal-tender quality in the payment of debt, imparted by law to any possible output of silver coin, thus ensuring to the unminted metal an equal value with the monetized coin. It is, therefore, glutting our currency with depreciated metal, while also impeding the only means of reversing that depreciation and restoring its value.

It has been as futile as costly. It neither gives nor has had a tendency to give an international currency to the silver of these 250,000,000 coins. It increases by one the number of nations burdened with the task of holding a depreciated metal at its old level in their bimetallic monetary units. There is a single difference. When the monetary dislocation began, the people of other nations had large stocks of silver coin subject to depression; we had none. We created one, and are daily adding to it.

To the feebleness of self-defeat in the exercise of our influence abroad, it thus unites the injury of a costly inflation at home. It is not merely the abdication of our actual power to hasten a solution of the international problem which will restore silver to its former use and value; it is the taxation of an otherwise overtaxed people \$24,000,000 per annum to delay and defeat that solution, besides being a use of the proceeds of that taxation to disorder our domestic currency, jeopard the stability of our unit of value, and accumulate a surplus which on the one hand presses the Treasury towards a silver basis, and on the other hand tempts Congress beyond a frugal expense. It blocks every avenue, not only to monetary but to fiscal and tax reform.

SHALL THE UNITED STATES PROMOTE CURE OF MONETARY DISLOCATION?

IV. To stop the purchase of silver is our only choice, our duty, and our interest.

It will stop a wasteful and injurious expense, and the taxation which defrays it.

It will commence and promote reform in the sum and the methods of federal taxation.

It will recover to the United States an equality of position (non-coinage) with foreign powers, which will give us due influence in negotiation.

It will induce negotiation, and negotiation to the end of relief, not for the purpose of delay.

Stopping the purchase and coinage of silver is the first step and the best which the United States can take in doing their great part to re-

pair the monetary dislocation of the world. Its origin was foreign; its remedy is international. The time is ripe for this powerful commonwealth to enter decisively upon that international transaction. The ripe moment must not be let slip. After becoming entangled in negotiation, we should not be free, as now, to act, first for our own advantage, and then for the promoting of our own deliverance and the world's deliverance from this world-wide trouble. Depressing industry and trade, it affects private prosperity everywhere. But its influence upon government finances is a separable injury and varies in different States according to the fiscal and currency systems which it disturbs. In England the depression is serious, but the disordered finances of her largest dependency, India, are the point of trouble which touches the government of Great Britain. In France and Germany the depression is general, but the fiscal problem is the maintenance of an enormous but not enlarging stock of coined silver lately depreciated nearly 30 per cent., at par with gold while keeping both in use. In the United States the depression of trade is great, caused by the natural unwillingness of those whose savings are little as of those whose capital is large, to risk its loss in falling prices and the hazard of a silver basis, thus contracting everywhere, not money, of which there is a superabundance, but the employment of savings as capital, by means of money, in organizing industry and keeping labor busy. But the trouble meanwhile caused to the Government finances is different. Here, too; as in France and in Germany, there is need of holding an enormous and also enlarging stock (larger now than that of France relatively to our commercial and banking habits) of coined silver, lately depreciated 30 per cent., at par with gold while keeping both in use.

To stop the purchase and coinage of silver is for this our local trouble also the first and best step. To increase our stock is to increase the difficulties of the Treasury, illegitimate and abnormal difficulties, which ought never to be imposed upon the Treasury of any democratic government, and which ought not to be increased. Its mission is to coin the two metals into money for the public—as much as everybody asks. It has no fitness for coining for itself and keeping the coinage. Its proper business as a fisc is to receive the people's revenue from taxes in good money which it has coined for them, and to expend that money as Congress bids, keeping no surplus at all beyond what insures punctual payments. A Treasury surplus is standing proof of bad finance—of bad laws, if such have made it necessary.

If to manufacture and store or distribute coin of a depreciated metal could stop its depreciation, or relieve the depression of trade, or im-

prove the money circulation, or call out into use for the employment of labor more of loanable capital, or arrest the drop in prices, then the Treasury trouble and the tax burden would have some offset. But it does the reverse. It inspires the owners, the borrowers, and employers of capital, who organize work for working-men to do, with an utterly incurable distrust. It is a reasonable distrust, which every man who has earned and saved five dollars that he would like to employ or lend as capital, knows as well as those who have saved thousands of dollars from their earnings. Every wage-earner, too, knows as well as they that silver inflation has not stimulated and does not stimulate industry or trade. Silver has never been as low as this year, (42 pence,) though the Treasury has bought and stamped \$250,000,000 of it in the last eight years. Prices of all commodities range lower than in any previous year of the nineteenth century.

CONSEQUENCES OF STOPPING SILVER PURCHASES.

To stop the purchase of silver will enable the Treasury, while the monetary system is restoring to its normal conditions, to maintain with certainty and greater ease the present stock of silver coin at par with gold in all our fiscal and local uses, to the great relief from distrust, of the owners and employers of capital, and so to the greater relief and increasing employment of labor—the first fruits of sound finance and the first condition of prosperity.

To stop the purchase of silver of course will cause a new fall in the London market. Speedier and more assured will then be the day of its final restoration to its former place in the money of the world. It is the recent heavy fall which has opened eyes that were blind and ears that were deaf. But a fall of silver, if the expense and influx to the Treasury are stopped, will not enhance the trouble of the Treasury or increase the difficulty of the duty which the laws impose to keep the silver circulation at par with gold within our own jurisdiction. Of course, compulsory employment of a money temporarily and locally inferior, in funded-debt payments, or in daily expense of any sort, means compulsory acceptance, and would force the inferiority to appear, whereas its skilful employment and an optional acceptance, which the laws of Congress do not forbid, will prevent that inferiority from appearing in our domestic trade which nothing can disguise in our foreign exchanges.

No prospective fall in the purchasing power of the metal can be so harassing to the Treasury as the perpetual inpour of a coin made full legal tender for its face, yet not worth its face, which the Treasury is expected to employ like gold as if it were worth its face.

To stop the purchase of silver will thus arrest the growth of that standing shame in our finance, the Treasury surplus. It will put us in the way of abolishing the same altogether, not by cheating our creditors, shaving our pensioners, or crippling our wage-earners, but by enabling the Treasury to hold the silver dollar firmly in a local parity with the gold dollar until we can unite with the leading powers in restoring and establishing their permanent equivalence.

It is a direct consequence of the monetary dislocation that wheat of India, which there fetched 3 rupees per quintal fourteen years ago, and there fetches 3 rupees per quintal to-day, can be sold in London (cost of transport apart) for as little as the gold price of 3 silver rupees of India in London to-day—a fall of 25 per cent.

This fall has caused, of course, a corresponding fall in the price of English and Irish home-grown wheat in London.

This lowered price of wheat in London has had to be met by a lower price of the American wheat surplus sold in London. The price of our surplus wheat determines the price of the whole wheat-crop of the United States.

So that the monetary dislocation has already cost our farming population, who number nearly one-half the total population of the United States, an almost incomputable sum, a loss of millions upon millions of dollars every year, a loss which they will continue to suffer so long as Congress delays to stop the silver purchase and by that act to compel an international redress of the monetary dislocation.

Another year's delay in stopping the silver purchase is the loss of remunerative prices upon another wheat-crop of the United States; is another year's stimulus to India's competition for the foreign markets of our agricultural product, and a reduction of our ability to hold that market against any competition in the world, (measured by a common money.)

While our war-tariff taxes, prolonged after 20 years of peace, have been choking off our manufactures from successful competition in foreign markets with the products of nations which do not tax raw materials, we have deemed foreign markets for the surplus produce of our farms as sure as seed-time and harvest. Our command of them at least we have deemed unassailable. They are in peril.

It is for Congress to consider whether a policy which does not prevent the loss of 25 per cent. off of our silver output to a few thousand mine-owners, but prolongs the loss to many million farmers of 25 per cent. off the price of their annual wheat-crop, should not now be abandoned and the only policy adopted which promises to restore the former prosperity of both.

If the law were repealed which makes compulsory Treasury purchases of silver, and if that repeal were accompanied by the declaration of Congress that the United States now hold themselves in readiness to unite with France, Germany, and Great Britain in opening their mints to the free coinage of silver and gold at a ratio fixed by international agreement, it is the deliberate judgment of the undersigned that before the expiration of another fiscal year this international monetary dislocation might be corrected by such an international concurrence, the two monetary metals restored to their old and universal function as the one standard measure of prices for the world's commodities, the depression of trade and industry relieved, and a general prosperity renewed.

I respectfully recommend to the wisdom of Congress the unconditional repeal of the act of February 28, 1878, accompanied by such a declaration.

FINANCES OF THE UNITED STATES.

The public debt consists of four principal items, which are, in round numbers, as follows:

1. The unfunded debt—

United States legal-tender notes\$346, 000, 000

2. The funded debt—

Loan of 1882, three per cents..... 64, 000, 000

Loan of 1891, four and a half per cents..... 250, 000, 000

Loan of 1907, four per cents..... 738, 000, 000

During the last seven years the receipts of the Federal Treasury have been over \$2,500,000,000; the net ordinary expenditures have been upon an average \$257,000,000 a year; the excess of the ordinary revenue has been, upon an average, over \$100,000,000 a year. Including the \$2,000,000 a month expended for silver, the total annual surplus revenue has been nearly \$125,000,000 a year for the last seven years. With this surplus we have been paying off funded debt at an average rate of \$100,000,000 a year, and have been spending the residue mostly on silver dollars, of which, in January next, 250,000,000 will have been coined.

Our home consumption, as taxed, gave during the last fiscal year an increase of revenue beyond that of the previous fiscal year of \$15,740,395; but the first quarter of the present fiscal year gave \$7,303,496 increase of revenue beyond that of the first quarter of the last fiscal year. In other words, our taxes (duties and excise, amounting last year to about \$310,000,000) on commodities entered from abroad or produced at home for consumption in the United States are giving an increase, and an augmenting increase.

Congress at the last session expressed a solicitude to hasten as fast as practicable the payment of the funded debt subject to call. Exercising due discretion, such has ever been my duty and purpose; and the recent indication of the judgment of Congress on that head, as well as the laws of Congress which direct my action, will continue to receive heedful attention. That part of the funded debt has now been reduced to \$64,017,800, and, in September, payment to any holder, without regard to future calls, was publicly offered. According to the best forecast now to be made in a matter that can better be judged of from week to week, it will be practicable to have called for payment the last of the three per cents by the first of next October. If prudent, an earlier date will be attempted.

CURRENCY REFORM—TAXATION REFORM.

Overwhelming force is thus contributed by Congress and by our rising revenue to the argument and plan for Currency Reform, as first in the order of importance and of time, and for Taxation Reform, which were submitted to the wisdom of Congress in my first Annual Report, and which I now beg leave to state in more detail.

Shortly after the term of the present Congress expires, and long before the Fiftieth Congress in the natural order of events would assemble, organize, and determine upon new legislation, it is probable that existing tax laws (at a time when the annual larger commercial need and use of money in moving the crops gives to their operation the most serious consequence) will be withdrawing from circulation and pouring into the Treasury the proceeds of a surplus taxation, beyond all sums of which the present Congress has hitherto considered or prescribed the employment. During the years of the immediate future, under the operation of existing tax laws, this surplus taxation would be at least as onerous and excessive as now. A world-wide monetary dislocation the present Congress can assist to cure. A needless depletion of the people's earnings at the rate of \$125,000,000 a year the present Congress can completely cure.

SURPLUS TAXATION \$125,000,000 A YEAR.

Employment for the proceeds of our surplus taxation, reasons for delay in reducing our surplus taxation, can no longer be found in a rapid payment of the funded debt. Setting aside the vanishing three per cents and the unfunded debt of \$346,000,000, the residue of the public debt has been in such wise funded by our predecessors that \$250,000,000 cannot be paid, except by purchase at a high premium to

the bondholder, before September 1, 1891, and that \$737,776,400 cannot be paid, except by purchase at a high premium to the bondholder, before July 1, 1907. On and after those dates, respectively, but not until then, those loans are payable, at the option of the United States, at their face and without premium. The present premium on the four and a half per cents of 1891 is about 11 per cent. The present premium on the four per cents of 1907 is about 28 per cent. To continue our present surplus taxation, and to employ its proceeds now or for some years to come in giving to the bondholder any such, or still higher, premiums by anticipatory purchase of those bonds before they are due and payable at par, is a fiscal policy so unnecessary, extravagant, and merciless to the industrious toilers of our land, from whose earnings, profits, or capital are deducted and taken all the revenues of the Treasury, that I cannot presume their representatives in Congress would let stand any law devolving upon the head of this Department such a thriftless task.

I also set aside as equally indefensible, the continuance of our present surplus taxation and its employment in extravagant appropriations, by which, of course, I neither mean to include suitable annual appropriations for the large expense of deepening the channel to carry off the floods of the Mississippi river, nor such as are needed for the still larger expense of providing our seaboard cities with a permanent coast defence. These are not the means of naval aggression nor incitements to militancy at home or abroad; they are prudent provisions "for the common defence and general welfare," which require no blanket clause to justify or cover them. Our engineers do not need extravagant appropriations to carry on as fast as practicable these great works, which should be the labor and the legacy of a peaceful generation for the benefit of those who will succeed to our inheritance.

I also set aside as alike indefensible the continuance of our present surplus taxation, and its employment to increase the Treasury hoards. These are now in enormous excess of any need which would continue to exist were the legal-tender debt paid off and were the silver basis finally averted and the fear of it removed from the public mind by stopping the silver purchase.

But this outline of our financial situation, prospects, and pitfalls requires the addition of one more fact.

SINKING FUND WILL CANCEL FUNDED DEBT WHEN DUE.

The computations of Treasurer Jordan, in his subjoined report, show that the provisions of the Revised Statutes (Sections 3694 and 3695) as to the sinking fund and the public debt, and compliance therewith, by

their continued operation hereafter, will effect the payment of the whole public debt, greenbacks and bonds, by the year 1908,—within a twelve-month after our last great funded loan becomes due and payable.

In other words, I am advised by that able officer that the whole public debt can be thus duly paid without a continuance of our present surplus taxation, but merely by conformity to the sinking-fund law and the regular annual appropriation therefor, from now till 1908—to wit, by “the purchase or payment of *one per cent.* of the entire debt “of the United States *to be made within each fiscal year*, which is to be “set apart as a sinking-fund, and the interest on which shall in like “manner be applied to the purchase or payment of the public debt, “as the Secretary of the Treasury shall from time to time direct.”

But in order to transfer our present and accruing proceeds of surplus taxation from the Treasury vaults to the pockets of the people; in order, also, to effect the most economical compliance with the sinking-fund law above cited, whilst the bonds not yet due are too far beyond our reach; and in order also to fulfil the law in which “the faith of the “United States is solemnly pledged to the payment in coin (redemption is elsewhere separately promised, and since 1879 has been practised) “to the *payment* in coin or its equivalent, of all the obligations of the “United States not bearing interest, known as United States notes,” (R. S., 3693, March 18, 1869,) a mere reduction of our present surplus taxation is not enough.

Currency reform and Taxation reform are both necessary and both unavoidable, if the Forty-ninth Congress, during the remaining three months of its life, shall perceive how powerfully we are constrained by our duty, our interest, and our necessities to enter now upon the open path of safety.

The financial situation, scanned at large and as a whole, plainly indicates our best policy. We should—

Reduce taxation immediately to an annual revenue sufficing to pay our annual expenditure, including the sinking-fund, and excluding the silver purchase;

Pay our unfunded debt of \$346,681,016 with the present surplus, and the surplus which will accrue before the whole reduction of taxation can be made or take effect, and while no more funded debt can be paid except at a premium during the five years from now until 1891.

REDUCE TAXES—PAY GREENBACK DEBT WITH SURPLUS.

I therefore respectfully recommend:

1. Repeal of the clause in the act of February 28, 1878, making compulsory, Treasury purchases of silver, for the reasons heretofore given

and in order to reduce surplus and unnecessary taxation \$24,000,000 a year.

2. Further reduction of surplus taxation, beginning in a manner which will be suggested below, close down to the necessities of the Government economically administered.

3. Repeal of the act of May 31, 1878, making compulsory, post-redemption issues and reissues of United States legal-tender notes, thus facilitating—

4. Gradual purchase and payment of \$346,681,016 outstanding promissory notes of the United States with the present and accruing Treasury surplus, issuing silver certificates in their room, and gold certificates if need be, without contraction of the present circulating volume of the currency, these notes (called greenbacks) being now the only debt due and payable before 1891 except the three per cent. bonds, which are probably all to be called and paid, early in the ensuing fiscal year.

The extraordinary conjunction of opportunity and necessity making practicable so complete a reform in our currency and so large a reform in our taxation, will, perhaps, excuse a reference to the conditions and the method of their execution which were set out in my last annual report, or any repetition of what I have already had the honor to suggest in respectfully urging upon Congress the easy provision of a better currency for the people of the United States than the best now possessed by any nation,—“a currency in which every dollar note shall be the representative certificate of a coin dollar actually in the Treasury and payable on demand; a currency in which our monetary unit, coined in gold, or its equivalent, coined in silver, shall not be suffered to part company.”

The act making compulsory post-redemption issues and reissues of United States notes and the act making compulsory Treasury purchases of silver are each a separate menace to the public tranquillity, are each injurious to the public morals, the public faith, and the public interest. But they do not double our difficulties. On the contrary, the repeal of both acts, and the use of the Treasury metal surplus in the substitution of coin certificates for greenbacks, will convert our worst kind of paper currency into the best kind,—indefinite promissory notes of debt made legal tender will be converted into representative certificates of coin, held subject to demand.

As the competency of the Federal Government to make its debts a legal tender of payment for the debts of its citizens, one to another, has, in these latter days, been affirmed, despite an absolute consensus of opinion to the contrary among its founders and statesmen of all par-

ties from 1789 to 1861, it seems to me in this conflict of legal opinions a duty to recur to the unquestioned conclusions of a sound finance.

COIN, NOT PROMISES, FIT FOR LEGAL TENDER.

When the union of the States was formed in 1789, and the present Constitution ordained, the last and first avowed objects of its framers were to secure liberty, and to establish justice. Political philosophy as yet has framed no higher ideal. Justice was their endeavor, and the Constitution, like the laws passed by the early Congresses, in which many of its framers sat, shows a fixed purpose to avert known perils to justice.

Among the chief instruments and means of justice is a least imperfect, least variable, coin monetary unit; the standard of all exchanges and lawful tender of payments. The framers of the Constitution were fresh from a bitter experience of the calamities consequent upon stretching the legal-tender quality from coin to promises to pay coin. So they built high a double barrier against that calamity. They limited the Federal Government to certain and delegated powers. They defined some and prohibited other certain powers to the States. And, lest the residue of unprohibited or undelegated powers which completed the round sum of sovereignty, should be implied into the Federal Government, they reserved them explicitly to the States respectively or to the people. Then to the Federal Government they gave many powers, but not this power to make the Treasury notes of the United States a legal tender in the payment of private debts. Then to the States they explicitly prohibited all future exercise of a similar power—theretofore at most grievous cost exercised by them amid the struggles of foundation or the throes of revolution. Nor in any one of the fifteen amendments which have enlarged the federal powers, over slavery, representation, citizenship, and the voting franchise, has there been enlargement of the power at first bestowed upon the United States, and vested in their Congress as the power to “coin money, regulate the value thereof and of foreign coin.” And while thus were refused in the Convention, and withheld in the Constitution, any warrant to amplify, or excuse for abusing, the power so specified and granted, it was also ordained that thereafter “no State shall * * * emit bills of credit; make anything but gold and silver coin a tender in payment of debts; pass any * * * law impairing the obligation of contracts * * *.” Under the last clause of the eighth section of the Constitution, the power thus granted was by the Second Congress, in the coinage law of 1792, as necessarily and properly executory of that power, wisely and fully ex-

exercised. It was exercised without abuse, without pretension to some sovereign power inherited, but as a specific power delegated to the Federal Government and vested in the Congress.

It was exercised not in relation to any power to borrow money; for money, besides being one kind of wealth, is also that kind which is a standard and measure of the value of all kinds of wealth; and to change the standard, in the act of borrowing, from coin to the promise to pay coin, would have been not borrowing merely, but also cheating or enriching the lender. If such power be indeed a sovereign power, legitimate and heritable, it is of the least precious patrimony reserved in the sovereignty of the people, for it was prohibited to the States, and never delegated to the United States.

The Congress of 1792 fixed the monetary unit of the United States in coin, gave it the name Dollar, made it the unit of the money of account in their offices and courts, named also its multiples and fractions, and then, opening their Mint free to all comers, affixed the full legal-tender quality to all gold and silver there coined.

Congress might, under its also granted power "to borrow money," have received the loan of all the coined gold and silver dollars that their owners would lend, for borrowing is not taking, by force of law or license, against the will of the lender. It is taking because the consent of the borrower to receive concurs with the consent of the lender to convey. In return for each and all of those coins it might have emitted its promises to pay on demand. That would have been the exercise of its granted power to borrow money. At further need it might have agreed to pay from its constant receipt of taxes (for the longer loan of money which its own constantly outgoing expenditure and the residue of still unborrowed money would provide) money in principal sums and as interest, giving therefor its time obligations. That would have been the exercise of its power to borrow money. But the power to change the unit of value in money so borrowed or so loaned, has no relation, legitimate or logical, with such or any power to borrow money. It is not derivable from the borrowing power. It is a power illegitimate and irrelevant both to the lending and to the borrowing power. The latter is a power to use the credit which a Government has from men's faith in its honor and its laws. The power to raise or depress the monetary unit of value is a power to destroy men's faith in the honor of a Government and its laws. The power to force into the circulation an unfit representative of, a false equivalent of, a debt of, that monetary unit of value, as its namesake and equal in exchange, is a power to destroy men's faith in the honor of a Govern-

ment and its laws. Their sense of betrayal, and their perception of the fact, are expressed by the non-equivalence in exchange often disclosed between the undebased coin and the debased coin, between the coin and the promise to pay converted into a legal tender, between the coin undepreciated and the depreciated coin, according as in any of these ways the monetary unit has been the instrument or the memorial of that duplicity. But such proceedings found no precedent, such opinions as are here controverted found no believer, no defender among the lawyers, statesmen, or people in the first seventy-two years of this Republic.

Not until after 1861, when a great danger had beclouded most men's perceptions of financial as well as constitutional law, was a legal-tender money made out of the debts of the United States.

Not until the infection spread was it ever deliberately argued that any representative of the unit of value could justly be suffered to be made, or to abide, in permanent depreciation and disparity therewith.

But whether or not a non-equivalent of the coin dollar may be made a lawful dollar, and whether or not post-redemption issues and reissues of such promises can be lawfully made, after twenty-one years of peace have superseded any real or imagined exigency of war, certain it is that every argument of policy now forbids the continuance of that legalized injustice. Had it ever been conferred, the Federal Government should be stripped of so dangerous a power. No executive and no legislature is fit to be trusted with the control it involves over the earnings and the savings of the people. No earthly sovereign or servant is capable of a just exercise of such authority to impair and pervert the obligation of contracts.

To apply the present and the unavoidably accruing proceeds of our surplus taxation during the next five years in payment of the only portion of the public debt beyond the vanishing three per cents, which is now due or will be payable, except at a high premium, before the four and a half per cents of 1891 mature, besides being a large measure of currency reform, will also diminish and finally dissipate the objectionable and invidious influence of the Treasury upon the money market and upon the business of the country. Skilful administration of the Department in respect to its incomes and outgoes may reduce to a minimum that influence, which cannot but be considerable while its receipts average a million dollars a day. But it is in no way for the public advantage, it is a distinct interference with private property, and it is an improper trust to be imposed upon any officer of the Government, when the most prudent, faithful, and intelligent exercise of his judg-

ment, and the wisest use of the power he is compelled to accept, cannot fail to promote the pecuniary advantage or involve the pecuniary disadvantage of this or that group of his fellow-citizens. It is no defence of the condition of things which has grown up since the war, and which has gradually converted the Treasury into such an overshadowing fiscal power, invoked at every commercial crisis, to say that we are becoming accustomed to it.

These illegitimate and unwarrantable encroachments of governmental influence should be restricted and abridged, with constant and inflexible purpose to restore the simplicity, compel the frugality, and limit the authority of Federal as of all our governmental institutions. Of these the true function is to guard our individual liberties, not to confine them, not to supersede them, not to direct them. Even monarchies are slowly discarding other functions. Democracies have no use for their cast-off trappings. It is liberty which has enlightened the world, not the necessary evil of legislatures, laws, courts, armies, and police, which with our taxes we pay to guard that liberty from aggression.

REDUCTION OF SURPLUS TAXATION.

It remains to consider the reduction of taxation to the needs of the Government economically administered.

What surplus we expend in paying off the greenback debt will diminish by so much the immediate reduction of our tariff taxation; for, while the funded debt stands, certainly it is not wise to discard the taxes on whisky, tobacco, and beer. Indeed, it is my own belief that whenever we begin taking off the shackles of war-tariff taxes on raw materials, such increased prosperity will follow to the employers who dread it, and such larger and steadier employment to the wage-earners who need it, by increasing the sales abroad of our own manufactures, and by whipping out foreign competitors in our own markets, that we shall see our income from imported manufactures dwindle so fast as not only to compel the retention of these most fit items of revenue—whisky, tobacco, and beer—but, perhaps, to drive us back to getting ten millions of revenue from two cents a pound tax on coffee and half as much from tea.

It is the reduction of war-tariff taxation which we have to consider.

Under our system of government by party, and the rule of the majority, I do not think it unbecoming even in a public officer at this time to recall certain responsible and specific pledges in respect to the sum and methods of Federal taxation, subject to which the people of the United States, in the exercise of a lawful election, took away the admin-

istration of this Government from the party intrusted therewith for a quarter of a century and lodged it in other hands.

Public life will cease to be the ambition of honorable and worthy men, if the deliberate pledges and professed principles of political parties are not a law for their leaders. Discharging, if I might, whatever hostility of tone, now irrelevant, it contains, I desire to refer to the record of one public obligation thus assumed, and thus accepted and made binding by the last general popular vote:

PLEDGE TO REDUCE TAXES.

“Unnecessary taxation is unjust taxation. * * * Surplus (taxation) of more than \$100,000,000 has yearly been collected from a suffering people. * * * We denounce the Republican party for having failed to relieve the people from crushing war taxes which have paralyzed business, crippled industry, and deprived labor of employment and of just reward. * * *

“Under a long period of Democratic rule and policy, our merchant-marine was fast overtaking, and on the point of outstripping, that of Great Britain. Under twenty years of Republican rule and policy our commerce has been left to British bottoms and the American flag has almost been swept off the seas.

“Under Democratic rule and policy, our merchants and sailors, flying the stars and stripes in every port, successfully searched out a market for the varied products of American industry. Under a quarter of a century of Republican rule and policy, despite our manifest advantage over all other nations in high-paid labor, favorable climates, and teeming soils; despite freedom of trade among all these United States; despite their population by the foremost races of men, and an annual immigration of the young, thrifty, and adventurous of all nations; despite our freedom here from the inherited burdens of life and industry in old-world monarchies, their costly war navies, their vast tax-consuming non-producing standing armies; despite twenty years of peace, that Republican rule and policy have managed to surrender to Great Britain, along with our commerce, the control of the markets of the world. * * *

“Instead of the Republican party's discredited scheme and false pretence of friendship for American labor, expressed by imposing taxes, we demand, in behalf of the Democracy, freedom for American labor by reducing taxes, to the end that these United States may compete with unhindered powers for the primacy among nations in all the arts of peace and fruits of liberty.”

These pledges can never be fulfilled without a reform in the sum and methods of Federal taxation. Nor can our country ever profit fully by its incomparable advantages among the nations of the earth in population, peace, land, and liberty so long as we go on pleading infancy, and swaddle, in mediæval rags, its victorious energies. It is these which need release and liberty. All our requisite taxation may be made an easy garment. We have made a prison of it, plastered stiff with obsolete contentions about protection and free trade.

OUR PRESENT PROLONGED WAR-TARIFF TAXES.

It is actually the war rates of the war-tariff of the last generation under which we are now living; for the undebated, unsifted law of 1883, made by a conference committee, did but keep alive the body of the tariff of 1864.

The average percentage of the taxes on, to the values of, imported commodities has been as follows:

Morrill tariff of 1859-'61, (before the war,) was.....	18.84 per cent.
War-tariff of 1862-'64 (in 1866 was highest) was.....	48.35 per cent.
Present Prolonged War-tariff (was in 1885)	46.07 per cent.

My last annual report reviews the history of this strange survival.

"Like our currency laws, our tariff laws are a legacy of war. If its exigencies excuse their origin, their defects are unnecessary after twenty years of peace. They have been retained without sifting and discrimination, although enacted without legislative debate, criticism, or examination. A horizontal reduction of 10 per cent. was made in 1872, but was repealed in 1875, and rejected in 1884. They require at our custom-houses the employment of a force sufficient to examine, appraise, and levy duties upon more than 4,182 different articles. Many rates of duty begun in war have been increased since, although the late Tariff Commission declared them 'injurious to the interests supposed to be benefited,' and said that a 'reduction would be conducive to the general prosperity.' They have been retained, although the long era of falling prices, in the case of specific duties, has operated a large increase of rates. They have been retained at an average ad valorem rate for the last year of over 46 per cent., which is but 2½ per cent. less than the highest rate of the war period, and is nearly 4 per cent. more than the rate before the latest revision. The highest endurable rates of duty, which were adopted in 1862-'64 to off-set internal taxes upon almost every taxable article, have in most cases been retained now from fourteen to twenty years after every such internal tax has been removed. They have been retained while purely revenue duties upon articles not competing with anything produced in the thirty-eight States have been discarded. They have been retained upon articles used as materials for our own manufactures, (in 1884 adding \$30,000,000 to their cost,) which, if exported, compete in other countries against similar manufactures from untaxed materials. Some rates have been retained after ruining the industries they were meant to advantage. Other rates have been retained after effecting a higher price for a domestic product at home than it was sold for abroad. The general high level of rates has been retained on the theory of counter-vailing lower wages abroad, when, in fact, the higher wages of American labor are at once the secret and the security of our capacity to distance all competition from 'pauper labor,' in any market. All changes have left unchanged, or changed for the worse, by new schemes of classification and otherwise, a complicated, cumbrous, intricate group of laws which are not capable of being administered with impartiality to all our merchants. As nothing in the ordinary course of business is imported unless the price here of the domestic, as well as of the imported, article is higher by the amount of the duty and the cost of

sea-transit than the price abroad, the preference of the tax-payer for duties upon articles not produced in the United States is justified by the fact that such duties cost him no more than the Treasury of his country gets. As for duties affecting articles that are also produced in the United States, the first to be safely discarded are those upon materials used by our own manufacturers, which now subject them to a hopeless competition, at home and abroad, with the manufacturing nations, none of which taxes raw materials."

FIELD OF FEDERAL TAXES, NOT LAND, NOT INCOMES.

The Federal power of taxation is almost uncircumscribed. It must be "for the *general* welfare," not for a partial or class benefit. Exports cannot be taxed. Direct taxes must be apportioned among the several States according to their population. Indirect taxes must be uniform throughout the United States. These include "all duties, imposts, and excises," which are, though advanced by the home producer or the importing merchant, alike actually paid by the final consumer.

Our experience of the difficulty and inequalities of the direct tax when applied to land, of which a square foot in one place is costlier than 100 miles square in another place, and in proportion to population, which varies in density now and changes continually; or when applied to individual incomes (the most direct tax conceivable, for when paid it cannot be shifted—it has no repercussion, which is the only common feature of the taxes held to be direct before war had disturbed the vision of courts and legislatures) under the prescribed rule of apportionment to the States according to population, confines their utility to State purposes, and excludes them from the just purview of Federal taxation.

BUT THINGS HERE CONSUMED; WITH INLAND AND SEAPORT COLLECTORS OF TAXES.

It is indirect taxes only which the Federal Government now levies, and to which, being thus practically restricted by those provisions of the Constitution, it must look for its revenues, and its remissions when revenue outruns expense. It is out of indirect taxes that arise contentions about protection and free trade, as they arose before the war when our debt was little and our expense so small that many thought Congress might have abolished custom-houses, and no harm.

"Free trade" accurately describes the internal commerce of our States. It applies to the commerce, one with another, of no other great and sovereign States. It does not apply to our trade with foreign nations. No man now living will ever see "free trade" adopted by these United States in their commerce with foreign nations; for taxes on imports, from the foundation of this Government, have ever been one chief source

of Federal revenue, and such they will continue to be. They are taxes upon consumption, like our internal-revenue taxes; and the true ground of choice among articles suitable for taxation is not the circumstance that they are produced at home or imported from abroad, for neither the producer nor the importer finally pays the tax. The consumer pays it. The place of origin is no criterion. The place of collection is no criterion. The place of consumption is where duties as well as excise are paid at last; seaport taxes and inland taxes, are alike in cost of collection, ($3\frac{3}{10}$ and $3\frac{6}{10}$ per cent.,) and alike in this, that although the importer or distiller advances the tax, he reimburses himself in the price to the consumer, who alone is taxed. The true ground of choice is that among all articles thus consumed within our own borders some are better suited for an equitable taxation than others. They are universally consumed, like sugar, or easily identified, like coffee, or their consumption may be safely impeded, like distilled spirits or fermented liquors or tobacco, or they are luxuries, like wines, silks, and diamonds. But of these articles suitable for taxation, foreign production affords as many as home production, or more. Taxes on imports are levied by all nations. Last year England raised a revenue of \$95,978,583 from taxes on imports; France, \$68,616,325; Germany, \$47,557,160. But no foreign nation taxes raw materials. Such taxes injure home industries, in which those materials are worked up and increased in value by home labor. Such taxes on raw materials, instead of excluding foreign competition from the home market, put our own employers of labor at a great disadvantage in the home market, and a greater disadvantage in every foreign market, compared with the foreigner employing labor upon untaxed raw materials.

“Protection” is also a misnomer. It implies superiority elsewhere. That superiority over any great industry of ours does not exist upon the globe. It implies infants here and adults elsewhere. Such is not our reputation. It implies that amid competition universal, where the fittest survive, we shall perish. But it is everywhere else believed that whenever we shall release ourselves from bad laws and enter that competition unmanacled, rivals will be distanced, and our primacy established in the markets and commerce of the world.

Such is also my own belief, making allowance for those misleading forms of speech which we seem obliged to use, but which state industrial intercourse in terms of military strife. It is a mistake to conceive it so. In warlike encounters one may gain what another loses, but on the whole, in industrial intercourse, every desired exchange is profitable to both parties, and this relation of things exhibits the nature of property, and is a corner-stone of society.

AMERICAN LABOR GETS AND EARNS THE HIGHEST WAGES.

Now, one proud fact attests the substance of our prosperity, and is the guaranty as well as proof of our power to hold against all competition the markets of the United States for everything we choose to dig or fabricate or grow, and to command and control for our surplus products, against all rivals, any foreign market.

We pay to labor the highest wages in the world. Highly-paid labor signifies the most efficient labor—signifies that high wages are the most profitable wages—signifies that the high rate is earned. The highest wages to the laborer thus involve and imply the lowest percentage of labor-cost in the product. But, other things being equal, the lowest percentage of labor-cost in any product is the guaranty that competition is outstripped.

Protectionists have done service to humanity by insisting upon the fact that we pay to labor the highest wages in the world. While debate has been going on whether our high wages were because of taxation or despite taxation, economists have discovered and demonstrated the correlative fact that labor-cost in our products is the least in the world.

HIGH WAGES ENSURE LOW LABOR-COST IN PRODUCT.

Were trade as free with and within all the ununited states of Europe as it is among the United States of America, the great surplus products of our industry, including the manufactured, would have the pick of foreign markets, for the reason that our labor, being the most highly paid and insuring lowest percentage of labor-cost, would everywhere surpass rivalry. Great Britain would follow next, for next to our labor hers is the highest paid, therefore the most efficient, and therefore next in effecting a low percentage of labor-cost in her chief products. France and Germany would follow next, and command the next unsupplied markets, and last of all, at the foot of the list, quite unable to compete with a single rival in whatever that rival chose to produce, would come the "pauper labor" of Europe and Asia. The low wages of pauper labor signify least efficiency, which is but another name for highest percentage of labor-cost in the product. Other things being equal, it is obvious that high wages can never be paid unless it is profitable to pay them, and it can only be a good business to pay the highest wages, because the efficiency of those who earn them vindicates its superiority by the reduction of labor-cost in the product.

High wages to labor and cheaper product are correlative terms. Low wages to labor and a costlier product are correlative terms. The one im-

plies the other wherever labor competes with labor upon otherwise equal ground. What pauper stands any chance competing with the intelligent artisan? The "pauper-labor-of-Europe" cry is a bugaboo, except that, in truth, our war-tariff taxes favor "pauper-labor" at the expense of American labor. Its products are not fenced out by our tariff laws. They come in because we ourselves destroy our own easy power of successful competition, even in our home market. By tariff taxes on raw materials we fence in our own surplus products, making them cost too much to compete at home, and, of course, too much to compete abroad, with manufactures from untaxed raw materials. In Mexico, Central and South America, we can of course make no better headway against European competition than at home. Diplomacy is not an acceptable substitute for trade and its laws. Our highly-paid labor ensures the lowest percentage of labor-cost in the product, but our tariff taxes upon raw materials handicap American manufacturers with the highest percentage of cost of material in the product. The result is that capital and labor united in our American industrial products, despite our advantage in the most highly-paid and efficient labor, are put into a hopeless competition with the industrial products of other nations, none of which taxes raw materials. The advantage we possess in the most efficient and highly-paid labor in the world is nullified by the self-imposed disadvantage of tariff-taxed raw material, with which our labor is inwrought.

OUR SUICIDAL TAXES ON RAW MATERIALS.

The total value of our domestic exports for the last fiscal year was almost exactly \$666,000,000, of which 86 per cent. were the products of our fields, forests, fisheries, and mines, and 16 per cent. only were the sum total of manufactured products in which American labor was inwrought.

In the last quarter of a century, progress in telegraphs, transportation, labor-saving inventions, and the mechanic arts has reduced the profits of capital and the rate of interest by more than one-half; has increased the wages of labor throughout the world; has augmented by at least a third the surplus which our manufacturers can produce beyond domestic needs for sale abroad. Prolonging without necessity our war-tariff taxes on raw materials, we have been undersold and excluded from foreign markets by nations not taxing raw materials. Despite their low-priced inferior labor, and the high percentage of labor-cost therefore included in their product, our taxed raw materials and their free raw materials have protected the so-called "pauper labor" of

Europe against American competition. Our increasing capacity to produce an industrial surplusage has been accompanied by war taxation exactly suited to prevent the sale of that surplusage in foreign markets. Out of our actual abundance this war taxation has forged the instrument of our industrial and commercial mutilation. Defeating our manufacturers in their endeavor to compete abroad with the manufacturers of untaxed raw materials, it has set them on a ferocious competition at cut-throat prices in our own home market, to which they are shut up, and for which their producing powers are increasingly superabundant. Long periods of glut and so-called overproduction have alternated with brief periods of renewed activity and transient prosperity like the present. These prolonged war-tariff taxes, incompetent and brutal as a scheme of revenue, fatal to the extension of our foreign markets, and disorderly to our domestic trade, have, in the last resort, acted and reacted with most ruinous injury upon our wage-earners. As the more numerous part of our population, our wage-earners are of course the first, the last, and the most to be affected by injurious laws. Every government by true statesmen will watchfully regard their condition and interests. If these are satisfactory, nothing else can be of very momentous importance; but our so-called protective statesmanship has disfavored them altogether. Encumbering with clumsy help a few thousand employers, it has trodden down the millions of wage-earners. It has for twenty-one years denied them even the peaceable fruits of liberty.

SCHEMES OF TAXATION TO PREVENT REVENUE.

Some whose mistaken view of their own interests has thus far prolonged our war taxation admit the necessity of its reduction, and propose to cut down the Federal revenue by raising still higher the rates of the war tariff, until by their prohibitory action they effect a more complete exclusion of imported commodities, which their fellow-citizens desire to buy with the products of American industry.

There are several objections to such a scheme. It is "protection" indeed, and, like "free trade," would prevent revenue on imports. But we need just now to get \$150,000,000 from taxation on imports. What is worse, it would continue the exclusion of the surplus products of American industry from foreign markets, and so prevent the natural diversifying of our industries. It therefore would postpone or prevent the larger and unintermittent employment of American wage-earners in productive industry. It would cut down the receipts of the Treasury but continue the multiplied indirect and incidental taxation levied upon

our whole population through prices enhanced by the higher tariff tax, yet nowhere able to be spent by any employer of labor in raising the wages of labor; for it would subject the employers themselves to another course of high profits, inviting an excess of new-comers, entailing overproduction for the home market, reckless competition, with no established outlet, in working off the surplus product; agreements to restrict production in order to keep up prices; then the discharge of labor by the employers who go to the wall; intermittent and diminished employment of labor by those who combine to prevent overproduction, and, last of all, desperate competition for employment by the wage-earners themselves; hopeless strikes, and profitable lockouts.

An official analysis of the last census (Appendix D) discloses that of the 17,392,099 persons in the United States then engaged in gainful work, (now 20,000,000,) about 95 per cent. cannot be subjected to foreign competition, and about 5 per cent. are all who can be, or, rather, whose employers can.

Last year \$192,905,023 was the increase of price we paid on commodities imported hither, and here consumed,—from taxes on imports, (except opium, dates, a few chemicals, etc.,) incidentally benefiting the employers of 1,000,000 persons here employed in producing the like commodities for general consumption here, by the tax-handicap on foreign competitors, raising their prices.

On the other hand, 19,000,000 persons, paying nineteen-twentieths of those tax-increased prices, and paying also nineteen-twentieths of any enhanced prices of the domestic product thus guarded against competition, were themselves engaged in other gainful work by its nature not subject to any foreign competition, and could therefore obtain no such incidental benefit, but only loss, by taxation.

The proposition to enlarge for the employers of 1,000,000 persons this incident of taxation on imports, unavoidable wherever the inland tax and seaport tax are not the same on each taxed commodity; the proposition to make this unequal incident the actual purpose of our taxation of them and the 19,000,000 persons who could only suffer, not enjoy, is not a proposition “to lay and collect taxes for the *general* welfare,” nor is it conformed to the spirit of the law that “all duties, imposts and excises, shall be uniform throughout the United States.”

THE CHEAPEST AND BEST TAXES TO RETAIN.

Another proposal is to reduce taxation by cutting down the tax on whisky, tobacco, and beers, and removing the duty on sugar.

Nobody pays a tax on tobacco except the consumers of tobacco. They are willing to pay for the luxury, and they ask no relief. Any

probable reduction of the tax on whisky would be more likely to increase the revenue than to diminish it. The price of sugar has fallen to an exceedingly cheap rate. Our own sugar-crop is so very small a part of the total amount of sugar we consume, that sugar ranks next to articles wholly produced abroad, like tea and coffee, in suitability for taxation, on the ground that its consumption is universal, that the tax is easily and cheaply collected, that the increased price paid by the consumers is an unconsidered trifle, and that what is taken from the tax-payers goes into the tax-payers' Treasury, not into a few private bank accounts.

Like the casting-away of the revenue from coffee and tea in 1872, the removal of the tax on sugar, which gives us our easiest and next to largest single item of revenue, (\$51,778,948,) at an annual cost of less than 90 cents per head, is now pressed forward, to avert the repeal of other taxes which are desired to operate an incidental and private benefit by enhanced prices to the domestic consumers of a large domestic product. These incidental and private benefits, in fact are subject to all the deductions I have already mentioned, and are subject to the chief deduction that the endeavor to make our tax-laws exclude foreign competition in our home markets promotes the success of that competition, besides effectually preventing the sale of our surplus product, our labor-product, in foreign markets. But the incidental benefit of the sugar tax to our cane-sugar producers, who are under the harrow of beet-root sugar competition and German bounties, which have driven them to improved processes and already lowered the price of sugar more than removal of the whole tax, is not got by excluding foreign sugar, for the great bulk of our sweetening comes from climates more tropical than ours. Nor does it prevent our sales in foreign markets of imported sugar refined and increased in value by the processes of American labor.

MORE INCOME FOR WAGE-EARNERS BY DROPPING WORST TAXES.

The taxes to be first remitted are those which prevent or hinder the sale of our surplus products in foreign markets. Their removal will set capital in motion by the promise of better returns, enlarge the steady employment and increase the annual income of many thousand wage-earners, whose prosperity will diffuse prosperity. These taxes are the duties on raw materials, and the most widely injurious of them is the tax upon raw wool. But the income of *all* the wage-earners in the United States can be at once enlarged effectively, certainly, permanently, by reducing the cost to them of the great necessities of life. Our war-tariff

taxes increase needlessly the cost of clothing, shelter, food, to every family. Every wage-earner's expense, every tax-payer's expense, for the clothing of himself and his family is nearly doubled, at least in the Northern, Middle, and Western States, by taxation which can now be remitted, yet leave the Treasury a sufficient revenue.

The duty on raw wool procured for the Treasury last year only \$5,126,108. The cost of woollen clothing for our 59,000,000 people was thereby and otherwise enhanced many times more than 90 cents a head, the only cost of our \$51,778,948 revenue from sugar. Moreover, any tax on raw wool imported will always make domestic wool-raising a bad business, for in our dry climates some varieties of wool required by the manufacturer are not produced. The tax prevents our manufacturers from competing in foreign markets with all manufacturers who can buy untaxed wool. The tax prevents our manufacture and export of competing woollens that require the use or admixture of non-American wools, and so restricts the home demand, and the growth of the home demand, for domestic wool—thus making the export of our domestic woollens impossible, yet involving the enhanced price of foreign and domestic woollens. This petty tax of \$5,126,108 on raw wool assists in nearly doubling the actual cost of their clothing to the American people, with no real and no incidental benefit to anybody except the foreign manufacturer.

UNTAX THE CLOTHING OF SIXTY MILLION PEOPLE.

I respectfully recommend to Congress that they confer upon the wage-earners of the United States the boon of untaxed clothing, and in order thereto, the immediate passage of an act simply and solely placing raw wool upon the free-list.

Of course, a repeal of the duty on raw wool should be followed by, but need not wait for, a compensating adjustment of the duties on manufactured woollens, whilst our manufacturers are learning the lesson that with the highest paid and most efficient labor in the world, with the most skilled management and the best inventive appliances, they need fear no competition from any rivals in the world, in home or foreign markets, so long as they can buy their wools free, of every kind.

But the common daily clothing of the American people need not be taxed; therefore, it ought not to be taxed; to free their clothing of taxes will finally reduce, by half, their expense for one of the three great necessities of life, and thus enlarge honestly and justly the income of every wage-earner in the United States.

FREE WOOL.

But this reduction of ~~unnecessary~~ and injurious taxation is not enough, and will operate slowly in diminishing revenue. Last year's import tax on raw wool is little more than the mere growth last year of our taxes from whisky, tobacco, and beer. To make wool free of tax may finally work a larger loss of revenue by enabling our woollen manufacturers to undersell at a profit the foreign importers who brought in last year \$40,536,509 worth of manufactures of wool, from which we got a tax of \$27,278,528.

To say nothing of other taxes upon raw materials, (Appendix E,) there are several hundred articles among the 4,182 articles that we tax, which ought at once to be swept off the tax list into the free-list,—petty, vexatious, needless taxes, much enlarging the cost of collecting the revenue from imports. In Appendix F will be found an itemized statement of the revenue from taxes during the fiscal year 1886. I shall at an early day, prepare and submit to Congress a supplementary report on the collection of duties.

DANIEL MANNING,
Secretary of the Treasury.

The Honorable

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

PAPERS

ACCOMPANYING

THE REPORT OF SECRETARY OF THE TREASURY.

REPORT OF THE TREASURER OF THE UNITED STATES.

TREASURY OF THE UNITED STATES,
Washington, D. C., December 1, 1886.

SIR: The operations of the Treasury of the United States for the fiscal year ending June 30, 1886, and its condition on that and subsequent dates, will be found in the following report, which I have the honor to respectfully submit:

RECEIPTS AND EXPENDITURES.

The net receipts of the Government were \$336,439,727.06; the net expenditures were \$242,483,138.50. The receipts were \$12,749,020.68 greater, and the expenditures were \$17,743,796.61 less than last year, making an increase in the net receipts for the past fiscal year over that of 1885 of \$30,492,817.29.

The excess of revenue over expenditures was \$93,956,588.56. The following statement contains the details:

	1885.	1886.	Increase.	Decrease.
Revenue from—				
Customs	\$181,471,939 34	\$192,905,023 44	\$11,433,084 10	.....
Internal revenue.....	112,498,725 54	116,805,936 48	4,307,210 94	.....
Sale of public lands.....	5,705,986 44	5,630,999 34	.....	\$74,987 10
Miscellaneous sources	24,014,055 08	21,097,767 80	.....	2,916,287 26
Total	323,690,706 38	336,439,727 06	15,740,295 04	2,991,274 36
Net increase .....	.....	.....	12,749,020 68	.....
Expenditures on account of—				
Civil and miscellaneous:				
Customs, light-houses, public buildings, &c	27,125,972 67	24,165,246 36	.....	2,960,726 31
Internal revenue.....	4,550,623 21	4,113,319 90	.....	437,303 31
Interior civil (lands, patents, &c.)	8,979,266 36	7,306,224 44	.....	1,673,041 92
Treasury proper (legislative, executive, and other civil)	36,854,109 05	33,323,749 66	.....	3,530,359 39
Diplomatic (foreign relations)	5,439,609 11	1,332,320 88	.....	4,107,288 23
Judiciary and quarterly salaries	4,544,677 98	8,926,068 61	.....	618,609 37
War Department	42,670,578 47	34,324,152 74	.....	8,346,425 73
Navy Department	16,021,079 67	13,907,887 74	.....	2,113,191 93
Interior Department (Indians and pensions)	62,654,762 12	69,504,022 20	\$6,849,260 08	.....
Interest on public debt	51,386,256 47	50,580,145 97	.....	806,110 50
Total	260,226,935 11	242,483,138 50	6,849,260 08	24,593,056 69
Net decrease .....	.....	.....	.....	17,743,796 61
Surplus available for reduction of debt	63,463,771 27	93,956,588 56	30,492,817 29	.....

The receipts on account of the Post-Office Department, not included in the above statement, amounted to \$52,997,135.26, an increase of \$5,687,399.91 over those of the preceding year; the expenditures increased from \$50,326,314.50, in 1885, to \$50,682,585.72, in 1886, or \$356,271.22. Of the amounts received and expended \$26,403,249.62 did not actually pass through the Treasury, having been received and disbursed by postmasters.

SUMMARY OF OPERATIONS.

Bonds of the United States amounting to \$44,531,350 were redeemed and applied to the sinking-fund.

Coupons from bonds of the United States amounting to \$7,557,412.79 were paid by the several assistant treasurers and forwarded to this office, where they were examined.

Interest amounting to \$42,498,687.92 on registered bonds of the United States, including bonds issued to the various Pacific Railroad companies, was paid by checks on the Treasury and assistant treasurers, amounting to 236,039 in number.

There were also issued 36,930 drafts in payment of warrants of the Secretary of the Treasury, 72,998 drafts on warrants of the Postmaster-General, and 24,539 transfer checks on assistant treasurers, making a total of 370,506 drafts and checks issued by the office during the fiscal year.

There were received for redemption during the year circulating notes of national banks amounting to \$130,296,606, which amount included \$29,557,588 of notes of failed, liquidating, and reducing banks.

Coupons from 3.65 per cent. bonds of the District of Columbia amounting to \$105,441.19 were paid and examined, and registered interest amounting to \$416,448.90 was paid by means of checks.

Of bonds held by the Treasurer of the United States in trust for national banks \$61,042,400 were withdrawn, of which amount \$56,925,300 was held to secure circulation, and \$4,117,100 was held as security for deposits of public moneys.

The bonds deposited to replace those withdrawn on account of circulation amounted to \$20,754,900, and on account of deposits to \$6,170,000, making a total decrease of \$34,117,500 in the bonds held by the Treasurer for national banks.

The total movement of bonds held for national banks was \$87,967,300.

The amount paid by national banks during the fiscal year on account of semi-annual duty on their circulation, was \$2,592,021.33, a decrease of \$202,562.68 from the amount paid on that account the preceding year.

Worn and mutilated United States notes amounting to \$63,000,000 were forwarded to the Treasury for redemption during the year, and new notes to a like amount were issued in place thereof.

The issue of silver certificates during the year amounted to \$4,600,000 and \$28,523,971 were redeemed.

Gold certificates amounting to \$10,188,895 were redeemed during the fiscal year.

The amount to the credit of disbursing officers of the Government on the books of the Treasury at the close of the year was \$17,947,107.64, of which \$15,331,354.53 was on deposit in the Treasury and \$2,615,753.11 in the national-bank depositories.

The unavailable funds of the Treasury June 30, 1886, were \$29,521,379.35, a decrease of \$3,946.39 from last year.

THE STATE OF THE TREASURY.

The condition of the Treasury on September 30, 1886, as compared with that on September 30, 1885, is shown by the following tables. In the Appendix, page 102, will be found a table changing the form of the Public Debt Statement used prior to 1885 to the present mode, from the year 1878 to June 30, 1886.

STATEMENT of the ASSETS and LIABILITIES of the TREASURY of the UNITED STATES, September 30, 1885.

		Assets.	Liabilities.	Balances.
GOLD —Coin	\$180,863,708 63			
Bullion	71,371,013 62			
		\$252,134,812 27		
Certificates	140,387,030 00			
Less amount on hand ..	22,491,510 00			
Net gold			\$117,803,520 00	
SILVER —Standard Dollars	185,431,083 00			\$134,230,273 37
Bullion	3,732,330 69			
		189,163,413 69		
Certificates	125,379,706 00			
Less amount on hand ..	31,783,440 00			
Net silver			53,840,266 00	
UNITED STATES NOTES		50,926,539 49		75,517,153 63
Certificates	24,070,000 00			
Less amount on hand ..	1,075,000 00			
Net United States Notes ..			22,905,000 00	
NATIONAL-BANK NOTES		2,945,127 88		27,831,539 49
DEPOSITS IN NATIONAL-BANK DEPOSITARIES		15,515,514 23		2,945,127 88
				15,515,514 23
Totals		490,666,403 56	234,530,795 80	256,149,617 56
Public Debt and Interest:				
Interest due and unpaid	1,825,829 10			
Accrued interest	9,393,087 00			
Matured Debt	3,671,385 28			
Interest on Matured Debt	221,333 30			
Debt bearing no interest	2,608 53			
Interest on Pacific Railroad Bonds due and unpaid	30,519 96			
Accrued interest on Pacific Railroad Bonds	968,352 68			
			16,310,174 91	
Fractional Currency redeemed... One and Two Year Notes redeemed	2,668 52			
Interest Checks and Coupons paid	145,740 57			
Interest on Pacific Railroad Bonds paid	4,500 00			
		152,918 09		
Totals		490,839,312 65	250,840,960 91	
Reserve for redemption of United States Notes, acts of 1875 and 1882			100,000,000 00	
Fund held for redemption of notes of National Banks "failed," "in liquidation," and "reducing circulation" ..	38,794,042 00			
Fund held for redemption of National Gold-Bank Notes	123,259 00			
Five per cent. Fund for redemption of National Bank Notes	12,452,800 92			
			51,400,109 32	
National Bank Notes in process of redemption		3,542,398 25		
Post-Office Department Account	2,917,627 58			
Disbursing Officers' Balances	24,220,056 14			
Undistributed assets of failed National Banks	411,180 39			
Currency and Minor Coin Redemption Account	488,128 35			
Fractional Silver Coin Redemption Account	69,605 80			
Interest Account, Louisville and Portland Canal Company	1,470 00			
Treasurer's Transfer Checks and Drafts Outstanding	4,071,407 14			
Treasurer U. S., Agent for paying interest on D. C. Bonds	156,918 92			
			83,226,332 32	
Interest on D. C. Bonds paid		13,980 20		
Totals		494,305,647 20	435,473,455 75	
Balance				58,922,191 42
Assets not available: Minor Coin	791,596 84			
Fractional Silver Coin	23,526,351 44			
		24,317,948 28		24,317,948 28
AGGREGATE		518,712,595 48	435,473,455 75	83,240,139 73

STATEMENT of the ASSETS and LIABILITIES of the TREASURY of the UNITED STATES, September 30, 1896.

		Assets.	Liabilities.	Balances.
GOLD.—Coin.....	\$189,051,898 65			
Bullion.....	53,509,735 87	\$242,561,134 53		
Certificates.....	125,848,127 00			
Less amount on hand..	41,036,560 00		\$84,809,577 00	
Net Gold.....				\$168,251,557 32
SILVER.—Standard Dollars.....	181,161,161 00			
Bullion.....	3,877,541 44	185,038,702 44		
Certificates.....	117,943,102 00			
Less amount on hand..	22,032,850 00		95,910,252 00	
Net silver.....				89,128,450 44
UNITED STATES NOTES.....		45,244,640 89		
Certificates.....	7,895,000 00			
Less amount on hand..	280,000 00		7,615,000 00	
Net United States Notes.....				37,629,640 89
NATIONAL-BANK NOTES.....		864,452 50		864,452 50
DEPOSITS IN NATIONAL-BANK DEPOSIT- TORIES.....		16,682,280 83		16,682,280 83
Totals.....		489,891,216 47	187,834,829 00	802,058,387 47
Public Debt and Interest:				
Interest due and unpaid.....	1,831,702 01			
Accrued Interest.....	8,098,018 50			
Matured Debt.....	7,815,035 25			
Interest on Matured Debt.....	201,061 07			
Debt bearing no interest.....	8,524 75			
Interest on Pacific Railroad Bonds due and unpaid.....	37,739 86			
Accrued Interest on Pacific Railroad Bonds.....	900,852 68		19,454,482 23	
Fractional Currency redeemed.....	3,524 75			
One and Two Year Notes re- deemed.....	10 50			
Interest (Checks and Coupons paid United States Bonds and Interest paid.....	107,870 95	426,760 17		
Totals.....		490,317,972 04	207,289,261 23	
Reserve for redemption of United States Notes, acts of 1875 and 1882.....			100,000,000 00	
Fund held for redemption of notes of Na- tional Banks "failed," "in liquidation," and "reducing circulation".....	65,515,823 25			
Fund held for redemption of National Gold-Bank Notes.....	97,021 00			
Five per cent. Fund for redemption of National Bank Notes.....	10,868,731 34		76,460,298 00	
National Bank Notes in process of redemption.....		1,917,974 89		
Post-Office Department Account.....	4,929,031 29			
Disbursing Officers' Balances.....	22,676,087 45			
Undistributed Assets of failed National Banks.....	824,411 80			
Currency and Minor Coin Redemption Account.....	433,080 78			
Fractional Silver Coin Redemption Ac- count.....	57,118 00			
Interest Account, Louisville and Portland Canal Company.....				
Treasurer's Transfer Checks and Drafts Outstanding.....	0,307,180 95			
Treasurer U. S. Agent for paying Inter- est on D. C. Bonds.....	846,184 73		35,574,504 50	
Interest on D. C. Bonds paid.....		10,318 15		
Totals.....		492,246,205 68	419,333,124 42	72,913,141 26
Assets not available. Minor Coin.....	206,021 70			
Fractional Silver Coin.....	26,846,613 76	27,142,634 62		27,142,634 62
AGGREGATE.....		519,386,800 20	419,333,124 42	100,053,775 78

The balance in the Treasury at the close of the year ending September 30, 1886, as shown by the books of this office, was \$100,055,775.78, an increase over that of 1885 of \$16,815,636.05.

The available balance was \$72,913,141.26, against \$58,922,191.45 last year, an increase of \$13,990,949.81.

After eliminating all certificates and certain other liabilities, together with the assets held to redeem them, the following table will show the increase or decrease in the various items of assets and liabilities during the year :

	Assets.	Liabilities.	Total.
	<i>Increase.</i>	<i>Decrease.</i>	
Gold Coin and Bullion	\$24,012,265 05	.....
Silver Dollars and Bullion.....	13,611,296 75	.....
United States Notes.....	9,698,111 39	.....
Deposits in National Bank Depositories.....	1,160,772 10	.....
Disbursing Officers' Balances and Small Accounts		\$1,188,863 15	
Total.....	48,488,445 29	1,188,863 15	949,677,308 44
	<i>Decrease.</i>	<i>Increase.</i>	
National Bank Notes.....	2,581,675 38	.....
Public Debt and Interest thereon		2,870,416 24	
Funds for the Redemption of National Bank Notes...		26,693,619 63	
Post-Office Department account		2,011,993 71	
Treasurer's Transfer Checks and Drafts outstanding		1,335,773 81	
Treasurer United States, agent, for paying interest on District Columbia Bonds		102,879 86	
Total.....	2,581,675 38	33,104,683 25	35,696,358 63
Increased Balance.....			12,990,949 81
Assets not available:			
Fractional Silver Coin (increase)	3,320,261 32	.....
Minor Coin (decrease).....	495,575 08	.....
			2,824,686 24
Aggregate Balance increased			16,815,636 05

The following table is published in order to explain the difference between the amounts appearing in the statement of assets and liabilities as made up from the statements of the several offices for September 30, 1886, showing their actual condition on that date, compared with the statement published at the end of the same month, which is made from the latest reports received from the various offices.

There is a considerable difference between the two statements, and the table will show the items which were increased or decreased in the period from the date of publication and the date of the returns.

			Balances.	
			Decrease.	Increase.
Gold Coin and Bullion decreased		\$47,881 05		
Gold Certificates actually outstanding decreased		882,230 00		
Gold Balance increased				\$334,845 95
Silver Dollars and Bullion increased		17,715 55		
Silver Certificates actually outstanding increased		523,140 00		
Silver Balance decreased			\$505,424 45	
United States Notes increased		1,020,560 05		
Currency Certificates actually outstanding decreased		90,000 00		
United States Notes Balance increased				1,110,560 05
National Bank Notes increased				177,663 00
Deposits in Depository Banks increased				2,269,032 93
Total			505,424 45	3,891,601 93
				505,424 45
Net increase in balance				3,386,177 48
Public Debt and Interest:				
Increase in liabilities	\$314,307 60			
Increase in paid items		342,123 67		
Post-Office Department account increased	43,315 99			
Disbursing Officers' Balances decreased		34,331 14		
Currency and Minor Coin redemption account increased	204,851 48			
Fractional Silver Coin redemption account decreased		138,254 00		
Treasurer's Checks and Drafts outstanding decreased		1,678,117 87		
Interest on District of Columbia Bonds paid, increased		288 16		
	562,505 07	2,193,147 84		1,630,642 77
Fractional Silver Coin decreased	53,132 44			5,016,820 25
Minor Coin increased	727 67			52,404 77
				4,964,415 48

The following table shows where the funds constituting the Treasury
STATEMENT showing by offices the CHARACTER

Offices.	United States notes and fractional currency.	Redeemed certificates of deposits.	National-bank notes.	Gold coin and bullion.	Gold certificates.
<i>Treasury and sub-treasuries:</i>					
Washington	\$4, 880, 635 11	.....	\$2, 016, 561 39	\$24, 874, 548 15	\$90, 300
Baltimore.....	797, 686 00	\$120, 000	30, 835 00	3, 605, 648 50	77, 580
New York.....	26, 310, 345 37	10, 000	29, 705 00	90, 517, 014 50	76, 924, 140
Philadelphia.....	3, 817, 223 20	70, 000	18, 131 90	2, 574, 745 00	1, 330, 570
Boston	1, 771, 013 00	70, 000	71, 235 00	11, 446, 110 50	598, 810
Cincinnati.....	1, 947, 277 19	.....	15, 000 00	6, 071, 583 00	30, 000
Chicago	2, 002, 477 00	10, 000	.....	1, 022, 000 00	755, 000
Saint Louis.....	291, 769 00	.....	10, 745 00	8, 481, 700 00	381, 700
New Orleans.....	728, 916 58	.....	10, 695 00	4, 340, 023 00	698, 500
San Francisco	614, 782 00	.....	.....	26, 956, 210 00	150, 000
<i>United States mints:</i>					
Philadelphia	50, 000 00	.....	.....	.....	.....
Coin.....	.....	.....	.....	5, 746, 833 50	.....
Bullion.....	.....	.....	.....	21, 717, 313 23	.....
Denver.....	776 85	.....	.....	.....	.....
Bullion.....	.....	.....	.....	115, 034 95	.....
New Orleans .....	.....	.....	.....	.....	.....
Coin .....	.....	.....	.....	26, 920 00	.....
Bullion.....	.....	.....	.....	488, 735 29	.....
San Francisco.....	.....	.....	.....	.....	.....
Coin .....	.....	.....	.....	3, 360, 620 00	.....
Bullion.....	.....	.....	.....	1, 771, 504 81	.....
<i>United States assay offices:</i>					
New York .....	.....	.....	.....	.....	.....
Coin .....	.....	.....	.....	6, 815 50	.....
Bullion.....	.....	.....	.....	20, 222, 468 57	.....
Boisé City.....	11, 611 03	.....	.....	.....	.....
Bullion.....	.....	.....	.....	12, 792 99	.....
Charlotte.....	.....	.....	.....	.....	.....
Bullion .....	.....	.....	.....	13, 388 33	.....
Helena.....	.....	.....	.....	.....	.....
Bullion.....	.....	.....	.....	160, 417 84	.....
Saint Louis .....	.....	.....	.....	.....	.....
Coin .....	.....	.....	.....	20 00	.....
Bullion .....	.....	.....	.....	7, 927 67	.....
In transit between offices ...	2, 164, 081 52	.....	80, 000 00	.....	.....
Total	45, 391, 503 83	280, 000	2, 282, 427 39	242, 561, 134 32	41, 036, 550
Less amount due depositors.	143, 428 20	.....	.....	.....	.....
	45, 248, 165 63	280, 000	2, 282, 427 39	242, 561, 134 32	41, 036, 550
Deposits held by national bank depositaries.....	.....	.....	.....	.....	.....
Old depositary accounts.....	.....	.....	.....	.....	.....
Total	*45, 248, 165 63	280, 000	†2, 282, 427 39	242, 561, 134 32	41, 036, 550

NOTE.—No bullion is held in the sub-treasuries.
* U. S. notes \$45,244,640.88 ; fractional currency \$3,524.75 ; total \$48,769,365.63.
† Including \$1,917,974.89 national-bank notes in process of redemption.

BALANCES.

balance are held and the several kinds of moneys of which it is composed:
of the *ASSETS of the TREASURY, September 30, 1886.*

Standard silver dollars and silver bullion.	Silver certificates.	Fractional silver coin.	Minor coin.	United States bonds, coupons, interest-checks, &c.	Unavailable funds.	Total.
\$51,042,674 00	\$5,686,230	\$2,089,907 84	\$3,782 96	.....	.....	\$90,690,639 45
1,070,791 00	1,885,080	403,299 25	8,105 47	\$369 84	.....	9,093,845 06
21,704,000 00	7,574,840	9,283,490 18	5,372 84	70,830 85	\$13,818 78	197,443,056 97
11,436,534 00	1,385,720	2,894,909 18	527 19	7,712 76	.....	22,536,072 28
251,358 00	4,568,170	822,004 10	652 19	18,176 62	.....	19,617,549 41
52,580 00	85,000	49,740 00	915 00	2,051 64	.....	8,252,068 83
2,129,412 00	278,000	1,571,771 00	281 05	8,181 23	.....	7,782,072 28
11,076,193 00	142,850	1,801,418 00	140 08	364 07	.....	21,199,378 15
1,772,023 00	247,969	537,023 80	1,701 41	.....	680,891 53	8,618,334 80
21,941,297 00	.....	7,350,100 59	7,800 47	167 69	.....	58,020,857 75
.....	.....	18,508 27	83,408 90	.....	.....	151,917 17
20,771,052 00	.....	.....	.....	.....	.....	36,517,890 50
2,407,523 05	.....	.....	.....	.....	.....	24,124,838 86
.....	.....	90	08	.....	.....	777 83
.....	.....	.....	.....	.....	.....	115,094 95
.....	.....	78	.....	.....	.....	78
4,100,868 00	.....	.....	.....	.....	.....	4,127,288 00
534,167 35	.....	.....	.....	.....	.....	1,022,962 04
.....	.....	4,030 87	.....	.....	413,557 98	417,588 83
12,397,167 00	.....	.....	.....	.....	.....	21,777,787 00
512,877 59	.....	.....	.....	.....	.....	2,290,972 40
.....	.....	274 20	13 26	.....	.....	287 46
4,725 00	.....	.....	.....	.....	.....	11,540 50
416,887 43	.....	.....	.....	.....	.....	29,638,796 00
.....	.....	.....	.....	.....	.....	11,611 03
.....	.....	.....	.....	.....	.....	12,792 99
.....
.....	.....	.....	.....	.....	.....	13,388 32
.....
.....	.....	.....	.....	.....	.....	160,417 84
.....	.....	20 50	2 17	.....	.....	22 67
.....	.....	.....	.....	.....	.....	20 00
85 42	.....	.....	.....	.....	.....	8,013 09
531 00	80,000	55,000 80	188,818 69	330,745 37	.....	2,898,677 38
125,142,165 44	22,032,850	26,881,500 16	296,021 76	433,549 57	1,108,268 27	567,446,060 74
102,463 00	.....	34,887 40	.....	.....	.....	281,778 60
125,032,702 44	22,032,850	26,846,612 76	296,021 76	433,549 57	1,108,268 27	507,104,282 14
.....	.....	.....	.....	.....	214,761 38	† 16,807,047 71
.....	.....	.....	.....	.....	63,652 20	63,652 20
† 125,032,702 44	22,032,850	26,846,612 76	296,021 76	433,549 57	1,386,681 85	584,124,982 05

† Including unavailable \$214,761 38.
‡ Silver bullion \$3,877,541.44; silver dollars \$181,161,161; total \$185,038,702.44.

The following table shows the excess of the cash assets of the Treasury, excluding certificates and other obligations held by it, over the net current liabilities other than United States notes, on October 31, 1886, as compared with the same day in 1885, compiled from the latest returns received:

	October 31, 1886.	October 31, 1885.	Increase.	Decrease.
ASSETS.				
Gold Coin.....	\$187,168,509 40	\$178,941,459 46	.....	.....
Gold Bullion.....	59,663,630 00	72,417,889 83	.....	.....
Total	246,832,148 40	251,359,349 29	.....	.....
Less certificates actually outstanding	88,294,969 00	100,020,760 00	.....	.....
Gold Balance	158,537,179 40	142,338,589 29	\$16,198,590 11	.....
Standard Silver Dollars	182,931,231 00	163,817,842 00	.....	.....
Silver Bullion.....	3,807,948 52	3,840,536 45	.....	.....
Total	186,739,179 52	167,657,878 45	.....	.....
Less certificates actually outstanding	100,306,800 00	93,140,772 00	.....	.....
Silver Balance	86,432,379 52	74,511,106 45	11,921,273 07	.....
United States Notes	38,107,305 27	45,695,341 31	.....	.....
Less certificates actually outstanding	7,140,000 00	18,145,000 00	.....	.....
United States Note Balance.....	30,967,305 27	27,550,341 31	3,416,963 96	.....
*National Bank Notes	3,192,745 73	5,438,240 80	.....	\$2,245,495 07
Deposits in National Bank Depositories	16,266,039 08	13,595,550 93	2,671,088 15	.....
Total Net Assets	295,396,249 00	263,433,828 78	31,962,420 22	.....
LIABILITIES.				
Matured Debt and Interest	12,548,927 49	3,053,689 76	8,595,237 73	.....
Interest due and unpaid	2,322,743 86	2,250,606 70	72,137 07	.....
Accrued Interest	5,126,268 25	5,931,309 25	.....	805,041 00
Interest due and unpaid, Pacific Railroad Bonds	34,679 96	19,949 96	14,730 00	.....
Accrued Interest, Pacific Railroad Bonds	1,202,470 24	1,202,470 24	.....	.....
Reserve for Redemption of U. S. Notes	100,000,000 00	100,000,000 00	.....	.....
Disbursing Officers' Balances, &c.	22,639,296 37	22,774,534 08	.....	135,237 71
Outstanding Drafts and Checks	5,601,057 68	4,634,813 21	966,214 47	.....
Five per cent. Fund for Redemption of National Bank Notes	10,424,631 04	12,541,912 74	.....	2,117,281 70
Fund for Redemption of Notes of failed, &c., Banks	78,105,363 60	39,510,138 85	38,595,224 75	.....
Post-Office Department account	4,517,610 53	3,706,081 52	811,529 01	.....
Total Liabilities	242,613,049 02	196,615,536 40	45,997,512 62	.....
Available Balance	52,783,199 98	66,818,292 38	.....	14,035,092 40
Assets not available:				
Minor Coin	235,421 45	719,831 24	.....	484,409 79
Fractional Silver Coin	26,300,335 88	22,965,535 70	3,334,800 18	.....
Total Balance.....	79,318,957 31	90,503,659 32	.....	11,184,702 01

* Includes National Bank notes in process of redemption.

DISBURSING OFFICERS' BALANCES.

In the statement made under the heading "Sub-treasuries," etc., suggesting that a change should be made in the existing method of keeping the Treasurer's accounts, the question as to the proper mode of making advances for the credit of such officers is presented, and the Treasurer expresses the hope that the subject will receive the earnest attention of Congress.

SUB-TREASURIES AND MINTS AND ASSAY OFFICES.

The Treasurer would again call attention to the large sums held by the mints and assay offices. Having no opportunity to examine or cause to be examined these different offices, it is suggested that the coins held in them should be placed in the actual custody of the Treasury, and the duties of the mint officers be confined to the assaying and coinage of the bullion placed in their charge.

The present method of examination of the sub-treasuries is very unsatisfactory, and an appropriation should be made which would enable the Treasurer to put these offices in good condition, and thus render the work of annual examination more thorough, but less costly, hereafter.

The Treasurer begs leave to refer to a letter addressed to the chairman of the Committee on Appropriations of the House, under date of April 27, 1886, relative to the needs of the sub-treasury system as it exists at present, in which his views are stated at length. That alterations should be made in the present system, in order that it may conform to the financial changes which have taken place since this system was adopted, does not admit of doubt. The annual and daily transactions of the Treasury have become so large, its financial operations and movements touch the interests of the people at so many points, that great care should be taken to avoid any unnecessary friction. As the country increases in wealth and population, with the consequent increase of its revenues and disbursements, it will be found impossible to continue the system in its present form. With the extinction of the 3 per cent. bonds, which, without some depression or event that cannot now be foreseen, must take place during the ensuing fiscal year, the only bonds available for the purposes of the sinking fund will be the 4½ and 4 per cent. bonds. These are now selling at a price which averages very little more than 2 per cent. per annum to the purchaser upon the cost, and it may fairly be assumed that this rate of 2 per cent. is the maximum rate to be earned during the life of these bonds. At the present cost of the collection of the revenue of the country, say \$3.70 per \$100, the loss on the existing sinking fund, say \$45,000,000 per annum, will be \$765,000 annually, assuming 2 per cent. as the best rate which the bonds can earn.

Without discussing the consequent possible derangement of our existing financial system if the purchases for the sinking fund are to be maintained at their present figures, it will be found to be impracticable to make these purchases at such times and in such manner as to relieve the money market in times of financial distress. As these derangements happen almost invariably at the time of the moving of the crops of the country, this statement is equivalent to saying that every productive interest in the country must pay toll to foreign buyers, through the lower range of prices which obtain at such times, because of the fact that our arrangements for collecting and disbursing our revenues are so defective as to need an artificial and violent remedy in order to place in active circulation the moneys withdrawn from the business of the country. This method of dealing with the public moneys is not true of any country but this, and the practical sense of the American people, as shown through its representatives in Congress, should be adequate to find a remedy for this constantly recurring evil—one sure to grow and become more burdensome in our future national history. This remedy should be found and adopted with the coming session of Congress, because the evil complained of will be upon us before its next meeting, and the Treasury left without any means of supplying the urgent needs of the country.

MINTS AND ASSAY OFFICES.

The following table, compiled from the records of the Mint Bureau and of this office, shows the assets and liabilities of the several mints and assay-offices on June 30, 1886:

STATEMENT showing the ASSETS and LIABILITIES of UNITED STATES MINTS and ASSAY OFFICES June 30, 1886.

ASSETS.

Institutions.	GOLD BULLION.		SILVER BULLION.		Gold coin.	Silver coin.	Minor coin.	Minor coinage metal.	Value of bullion shipped for coinage.	Old deficiencies brought forward.	Total.
	Standard weight.	Value.	Standard weight.	Value (cost).							
Coinage mints:	Ounces.		Ounces.								
Philadelphia	1,131,491.01	\$21,050,985 51	1,082,149.38	\$1,527,199 56	\$30,970 00	\$28,463,228 04	\$1,513,446 124 22				\$37,622,520 84
San Francisco	68,748.25	1,055,781 50	409,652.28	877,726 21	4,074,820 00	19,236,003 84				\$413,567 00	25,158,579 57
New Orleans	25,702.107	478,184 81	1,171,563.54	1,061,911 78	85,770 00	8,436,487 77					5,012,353 86
Assay offices:											
New York	1,064,147.080	10,708,084 99	501,180.17	500,587 08	28,008,584 81	70,587 27					48,437,764 18
Denver					43,985 08						152,619 58
Helena	3,052.400	56,974 80	1,148.00	1,020 88	9,359 70			\$44,000 38			111,365 85
Boisé City	620,560	11,515 92	182.00	134 41	10,174 82			14,444 44		\$11,611 03	37,910 12
Charlotte					11,442 31			16,941 48			18,283 79
Saint Louis	153,601	2,803 05	79 90	71 25	13,832 90						16,767 20
Charlotte										\$32,000 00	32,000 00
Dahonaga										\$27,950 03	27,950 03
Total	2,281,925.045	42,454,430 23	3,765,936.27	3,468,620 67	736,949 75	51,206,940 92	4,003 51	46,124 22	164,010 15	485,118 02	136,628,204 47

LIABILITIES.

Institutions.	Bullion fund.	Undeposited earnings.	Seigniorage on silver.	Unpaid depositors.	Minor coin profits.	Minor coin metal fund.	Unpaid cent depositors.	Total.
Coinage mints:								
Philadelphia	\$57,107,084 08		\$310,534 00	\$117,874 04	\$57 73	\$30,000 00	\$70 00	\$57,622,520 84
San Francisco	25,175,848 21		21,807 56	1,364 38				25,158,579 57
New Orleans	4,827,780 58		184,419 49	73 79				5,012,353 86
Assay offices:								
New York	48,308,799 59	\$15,607 29		116,267 89				48,437,764 18
Denver	151,172 03	1,446 00						152,619 58
Helena	109,734 21	1,021 13						111,365 85
Boisé City	37,826 93	83 19						37,910 12
Charlotte	17,785 07	648 72						18,283 79
Saint Louis	16,674 13	10 76		76 31				16,767 20
Charlotte	32,000 00							32,000 00
Dahonaga	27,950 03							27,950 03
Total	135,770,705 79	19,513 60	533,201 44	234,653 91	57 73	50,000 00	70 00	136,628,204 47

* Deficiencies in bullion fund incurred prior to organization of Mint Bureau. § The deficiency in the cash of N. IL Camp's account when suspended May 15, 1885, of which \$11,607.37 belonged to the bullion fund and \$988.30

Included in bullion balance of New York assay-office.

§ Old account.

consisted of profits, has since been reduced by \$912.64.

DEFICITS, UNAVAILABLE FUNDS.

The unavailable funds were decreased by the following items: A reduction of the amount of the deficit at the office of the assistant treasurer of the United States in New Orleans, La., of \$3,700.05, a reduction of the amount of deficit in the United States assay office at Boise City, Idaho, of \$246.34; making a total decrease of \$3,946.39.

UNAVAILABLE FUNDS of the GENERAL TREASURY and of the POST-OFFICE DEPARTMENT.

GENERAL TREASURY.

On deposit with the following States under the act of June 23, 1836:

Maine	\$935, 838 25	
New Hampshire	680, 086 79	
Vermont	669, 086 79	
Massachusetts	1, 338, 173 58	
Connecticut	704, 670 60	
Rhode Island	382, 335 30	
New York	4, 014, 520 71	
Pennsylvania	2, 867, 514 78	
New Jersey	704, 670 60	
Ohio	2, 007, 260 34	
Indiana	800, 234 44	
Illinois	477, 919 14	
Michigan	286, 751 49	
Delaware	286, 751 49	
Maryland	953, 838 25	
Virginia	2, 198, 427 09	
North Carolina	1, 433, 757 39	
South Carolina	1, 051, 422 09	
Georgia	1, 051, 422 09	
Alabama	669, 086 79	
Louisiana	477, 919 14	
Mississippi	382, 335 30	
Tennessee	1, 433, 757 39	
Kentucky	1, 433, 757 39	
Missouri	382, 335 30	
Arkansas	286, 751 49	
Total on deposit with the States		\$28, 101, 644 91
Default, Sub-Treasury U. S., New Orleans, La., 1867, May & Whitaker	675, 325 22	
Sub-Treasury U. S. New Orleans, La., 1867, May property	5, 566 31	
Deficit, Sub-Treasury U. S., New York, N. Y., 1867, counterfeit 7.30's	4, 392 91	
Sub-Treasury U. S., New York, N. Y., 1867 to 1880	9, 425 87	
		\$994, 710 31
Deficits and defaults, Branch Mint U. S., San Francisco, Cal., 1857 to 1869		413, 557 90
Failure, Venango National Bank of Franklin, Pa.	181, 177 51	
First National Bank of Selma, Ala.	33, 383 87	
		214, 561 38
Default, Branch Mint U. S., Dahlonega, Ga., 1861	27, 950 03	
Branch Mint U. S., Charlotte, N. C., 1861	32, 000 00	
Depository U. S., Galveston, Tex., 1861	778 66	
Depository U. S., Baltimore, Md., 1866	547 50	
Depository U. S., Pittsburgh, Pa., 1867	2, 126 11	
Deficit, Depository U. S., Santa Fé, N. Mex., 1866, short in remittance	249 90	
		63, 652 20
		1, 386, 481 85
Deficit, Sub-Treasury U. S., New Orleans, La., 1885	21, 641 56	
Deficit, U. S. Assay Office, Boise City, Idaho, 1885 (N. H. Camp's account)	11, 611 03	
		33, 252 50
		1, 419, 734 44
Total General Treasury		29, 521, 879 35

POST-OFFICE DEPARTMENT.

Deficit, Sub-Treasury U. S., New Orleans, La., 1861	31, 164 44	
Depository U. S., Savannah, Ga., 1861	205 76	
Depository U. S., Galveston, Tex., 1861	83 36	
Depository U. S., Little Rock, Ark., 1861	5, 623 50	
		87, 277 06
Total		29, 558, 656 41

The Treasurer renews his recommendation of the report of 1885, that steps be taken to so change the method of keeping the accounts of the Treasury Department that its actual condition may be shown when called upon, and the character of the assets and liabilities be accurately stated.

THE SINKING FUND AND PUBLIC DEBT.

Referring to Tables Nos. 46 and 47, in the Appendix to this report, it is suggested that a revision of the method heretofore adopted in making up the sinking fund be made, and that the annual payments on account of this fund conform therewith. It will be seen that by the present method the "entire debt" of the United States will be retired by the year 1908. If the method suggested in the report, page 105, be adopted this debt will be extinguished by the year 1913. Any reduction of the public debt in excess of the annual requirements of the sinking fund will, of course, hasten the period of its total extinction.

STATEMENT showing the FORMER and the PROPOSED MANNER of ESTIMATING the SINKING-FUND CHARGE for the fiscal year 1887.

According to former method the estimate is made as follows:

1st. 1 per cent. of the principal of the debt, including coin and currency certificates outstanding and in the cash of the Treasury on June 30, 1886, and excluding bonds issued to Pacific Railroad Companies		\$17,750,630 14
2d. Interest accruing for one year on previous years' retirement of debt, as follows:		
*6 per cent. bonds.....	\$264,805,100 00	
* Matured certificates of indebtedness (4 per cent.).....	678,000 00	
Compound-interest notes and small items (6 per cent.).....	5,680 00	
United States legal-tender notes, non-interest bearing	29,090,564 00	
Fractional currency, non-interest bearing	26,178,715 96	
Old demand notes, non-interest bearing.....	505 00	
A total of	320,758,544 96	
Upon which interest is estimated to be accruing at 6 per cent		19,245,512 70
Seven-thirty notes.....	1,950 00	143 85
*10-40s of 1864, 5 per cent	690,300 00	
Funded loan of 1881, 5 per cent	68,666,700 00	
One-year notes, 5 per cent	1,490 00	
A total of	69,358,490 00	
Upon which interest is estimated at 5 per cent		3,467,924 50
* Consols of 1907, interest at 4 per cent.....	1,500,000 00	60,000 00
Bonds continued at 3½ per cent.....	137,466,600 00	4,811,331 00
Loan of 1882, interest at 3 per cent.....	101,880,950 00	3,056,428 50
Total principal of debt in sinking fund	630,966,534 96	
Aggregate of 1 per cent. of debt and one year's interest on securities retired prior to July 1, 1886		48,391,969 19
3d. One year's interest at 3 per cent. on this amount.....		1,451,759 08
Total sinking-fund charge		49,843,728 27

The proposed manner is as follows:

1st. 1 per cent. of the principal of the debt, excluding coin and currency certificates outstanding and in cash of the Treasury, and amount reserved for the redemption of legal-tender notes		14,740,346 06
2d. Interest for one year on the debt in the sinking fund, at the rates which the bonds would now bear if they had been refunded; and at the present rate (3 per cent.) on debt bearing no interest, as follows:		
4 per cent. upon the items above marked *	267,673,400 00	10,706,936 00
3 per cent. upon all other items.....	363,293,134 96	10,898,794 05
Making a total of	630,966,534 96	36,346,076 11
3d. One year's interest at 3 per cent. on \$36,346,076.11.....		1,090,382 28
Total sinking-fund requirement		37,436,458 39
A reduction of.....		12,407,269 88

UNITED STATES NOTES.

The following table shows the amount of each denomination of United States notes outstanding at the close of the last four fiscal years and on November 30, 1886:

Denomination.	1883.	1884.	1885.	1886.	Nov. 30, 1886.
One dollar	\$27, 736, 456 80	\$26, 660, 184 80	\$24, 952, 061 80	\$17, 603, 922 40	\$14, 319, 238 60
Two dollars	25, 524, 394 20	24, 897, 886 20	25, 295, 060 20	18, 204, 369 60	14, 938, 315 40
Five dollars	71, 150, 085 00	75, 552, 915 00	73, 997, 805 00	85, 629, 219 00	97, 990, 310 00
Ten dollars	72, 732, 886 00	69, 527, 016 00	64, 539, 386 00	66, 658, 661 00	71, 267, 924 00
Twenty dollars	62, 346, 909 00	58, 054, 629 00	55, 126, 509 00	55, 078, 379 00	56, 745, 463 00
Fifty dollars	23, 985, 895 00	23, 208, 895 00	23, 459, 895 00	23, 291, 205 00	21, 698, 345 00
One hundred dollars ..	34, 302, 390 00	33, 640, 990 00	32, 896, 790 00	31, 359, 700 00	29, 232, 820 00
Five hundred dollars ..	15, 098, 500 00	16, 914, 000 00	16, 557, 000 00	12, 424, 000 00	8, 496, 500 00
One thousand dollars ..	14, 328, 500 00	19, 034, 500 00	28, 716, 500 00	37, 361, 500 00	32, 942, 500 00
Five thousand dollars ..	315, 000 00	130, 000 00	100, 000 00	60, 000 00	50, 000 00
Ten thousand dollars ..	160, 000 00	60, 000 00	40, 000 00	10, 000 00	10, 000 00
Total	347, 681, 016 00	347, 681, 016 00	347, 681, 016 00	347, 681, 016 00	347, 681, 016 00
Less unknown denominations destroyed in sub-treasury in Chicago fire	1, 000, 000 00	1, 000, 000 00	1, 000, 000 00	1, 000, 000 00	1, 000, 000 00
Outstanding	346, 681, 016 00	346, 681, 016 00	346, 681, 016 00	346, 681, 016 00	346, 681, 016 00

The present business season, which began much earlier than usual, has absorbed a large amount of currency, and this increased movement has not yet ceased. There has been shipped from the Treasury at Washington and other points, since July 1, 1886, the following amounts and kinds of small currency:

Legal-tender notes, \$5	\$14, 055, 135 00	
Legal-tender notes, \$10	6, 979, 330 00	
Legal-tender notes, \$20	1, 969, 940 00	
Legal-tender notes, \$50	147, 500 00	
Legal-tender notes, \$100	194, 300 00	
		\$23, 346, 205 00
Various denominations and kinds		152, 090 00
Silver certificates, \$1	4, 744, 606 00	
Silver certificates, \$10	6, 555, 850 00	
Silver certificates, \$20	2, 239, 640 00	
		13, 540, 096 00
Standard silver dollars:		
Payments during same period, \$21,328,558. Increase of outstanding		9, 201, 728 00
Fractional silver coin:		
Payments during same period, \$1,177,929. Increase of outstanding		3, 096, 614 00
Total of all kinds		49, 426, 733 00

The reduction of the available Treasury balance during same period is as follows :

July 1, 1886	\$75, 191, 100 00	
November 30, 1886	40, 098, 556 00	
		<u>\$33, 007, 553 00</u>
Increase in circulation of gold certificates during same period:		
Outstanding July 1, 1886	76, 044, 875 00	
Outstanding November 30, 1886	90, 520, 683 00	
		<u>14, 476, 258 00</u>
Increase in circulation of silver certificates during same period:		
Outstanding July 1, 1886	88, 116, 225 00	
Outstanding November 30, 1886	105, 519, 817 00	
		<u>17, 403, 592 00</u>
Increase in Treasury, gold and bullion:		
In Treasury July 1, 1886	232, 838, 123 00	
In Treasury November 30, 1886	254, 450, 853 00	
		<u>21, 612, 730 00</u>
Increase in Treasury, standard silver dollars and bullion:		
In Treasury July 1, 1886	184, 345, 764 00	
In Treasury November 30, 1886	189, 003, 321 00	
		<u>4, 657, 557 00</u>
Increase in Treasury, legal-tender notes during same period:		
In Treasury July 1, 1886	22, 863, 316 00	
In Treasury November 30, 1886	29, 548, 188 00	
		<u>6, 679, 872 00</u>

United States notes redeemed in coin during the fiscal year at the office of the Assistant Treasurer of the United States in New York, under the act of January 14, 1875, amounted to \$6,863,699. The total redemptions under the above act to November 30, 1886, amount to \$25,120,793.

The changes which have taken place in the various denominations of United States notes in circulation during the last three fiscal years, and for July, August, and September of the present year, appear in the following table:

Denominations.	1884.					1885.					1886.				
	Issued.	Redeemed.	Decrease in circulation.	Increase in circulation.	Issued.	Redeemed.	Decrease in circulation.	Increase in circulation.	Issued.	Redeemed.	Decrease in circulation.	Increase in circulation.	Issued.	Redeemed.	Decrease in circulation.
One dollar	\$8,943,235	\$10,010,508	\$1,070,273	.....	\$10,187,153	\$11,885,276	\$1,708,123	.....	.....	.....	.....	.....	.....	.....	.....
Two dollars	7,808,000	8,424,545	626,545	.....	10,850,000	10,458,817	.....	.....	.....	.....	.....	.....	.....	.....	.....
Five dollars	23,420,000	19,017,170	.....	\$4,402,830	19,300,000	18,858,110	.....	444,890	\$31,820,000	11,838,585	.....	.....	.....	.....	.....
Ten dollars	12,100,000	15,365,970	3,265,970	.....	9,040,000	14,637,630	4,597,630	.....	9,960,000	7,810,725	.....	.....	.....	.....	.....
Twenty dollars	9,280,000	13,672,280	4,392,280	.....	9,760,000	12,688,120	2,928,120	.....	7,120,000	7,108,190	.....	.....	.....	.....	.....
Fifty dollars	4,200,000	4,877,000	677,000	.....	4,800,000	4,549,000	.....	251,000	2,000,000	2,198,050	.....	.....	.....	.....	.....
One hundred dollars	6,237,000	6,898,400	661,400	.....	6,600,000	6,344,200	.....	744,200	4,700,000	6,217,000	.....	.....	.....	.....	.....
Five hundred dollars	4,902,000	3,084,500	.....	1,816,500	2,350,000	2,707,000	557,000	.....	400,000	4,533,000	.....	.....	.....	.....	.....
One thousand dollars	10,000,000	5,294,000	.....	4,706,000	12,800,000	2,818,000	.....	9,982,000	17,500,000	8,525,000	.....	.....	.....	.....	.....
Five thousand dollars .....	.....	185,000	185,000	.....	.....	30,000	30,000	.....	.....	40,000	40,000	.....	.....	.....	.....
Ten thousand dollars .....	.....	100,000	100,000	.....	.....	20,000	20,000	.....	.....	30,000	30,000	.....	.....	.....	.....
Total	83,948,236	83,948,236	10,924,330	10,924,330	84,480,153	84,408,153	10,775,073	10,775,073	83,000,000	83,000,000	20,265,039	20,265,039	.....	.....	.....
August, 1886.															
September, 1886.															
One dollar .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Two dollars .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Five dollars .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ten dollars .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Twenty dollars .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fifty dollars .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
One hundred dollars .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Five hundred dollars .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
One thousand dollars .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Five thousand dollars .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ten thousand dollars .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	5,868,000	5,803,000 00	3,944,800 00	3,944,800	5,440,000	5,440,000	2,112,108	2,112,108	7,820,000	7,820,000	5,075,760	5,075,760	.....	.....	.....

In the Appendix will be found tabular statements of the redemptions of legal-tender notes by denominations and fiscal years. Believing that the currency question will receive a large part of the attention of Congress during its coming session, an earnest endeavor has been made to furnish all the information bearing on this subject which comes within the province of this office.

Attention is again called to the fact that in the so-called "reserve vault" lies \$147,898,000 of paper money, prepared for issue without authority of law, and legislation is requested that will permit of its legal disposition.

CERTIFICATES OF DEPOSIT, ACT OF JUNE 8, 1872.

The deposits of legal-tender notes by national banks during the year, for which they received certificates issued under authority of the act of June 8, 1872, amounted to \$17,650,000; the amount of certificates redeemed was \$58,825,000; the amount outstanding at the close of the year was \$18,110,000.

The amount outstanding November 30, 1886, was \$7,025,000.

The Treasurer again desires to call attention to the fact that these certificates are furnished at considerable expense and risk to the Government, without any benefit. This large amount of money, being held in trust for the banks, is liable to be paid out at any moment, and cannot be made available, under the law, for use in any of the financial transactions of the Treasury.

It simply adds to the already great responsibility of the Treasury, being subject to loss by speculation, carelessness, or fire.

It is recommended that all expense attending the issue of such certificates be borne by the banks who are benefited.

The following table shows the aggregate issues and redemptions and amounts outstanding for each year from the date of the first issue:

Fiscal year.	Total amount		Outstanding, as shown by the Treas- urer's books.
	issued.	redeemed.	
1873	\$57,240,000	\$25,430,000	\$31,810,000
1874	137,000,000	78,915,000	58,085,000
1875	210,000,000	180,050,000	29,950,000
1876	301,400,000	268,260,000	33,140,000
1877	378,285,000	324,305,000	53,980,000
1878	404,900,000	418,720,000	46,245,000
1879	534,730,000	525,400,000	29,330,000
1880	601,780,000	588,000,000	13,780,000
1881	612,850,000	601,235,000	11,615,000
1882	620,760,000	610,400,000	10,360,000
1883	640,790,000	636,010,000	4,780,000
1884	670,600,000	663,400,000	7,200,000
1885	733,215,000	703,030,000	30,185,000
1886	780,805,000	762,755,000	18,050,000

NOTE.—The amounts outstanding differ from those shown by the Public Debt Statements, for the reason that the reports of issues and redemptions of the last days of the fiscal year at the several offices do not reach the Department until after the statements of the debt are made up.

GOLD CERTIFICATES.

The gold certificates of the old issue, under the act of March 3, 1863, outstanding at the close of the fiscal year, amounted to \$2,427,420, the redemptions during the year having been \$134,860.

Of the new issue under the act of July 12, 1882, there were nominally outstanding at the close of the fiscal year \$128,746,825; the Treasury

offices held \$55,129,870 (compared with \$13,593,410 at the close of 1885), leaving actually in circulation \$73,616,955, a decrease of \$50,550,495 in the year.

On November 30, 1886, the amount of the certificates of the new issue outstanding had decreased to \$122,581,607, but of this amount only \$88,111,913 was actually in circulation, the certificates held in the Treasury offices having decreased to \$34,469,694.

The issues and redemptions during the fiscal year, and the amounts outstanding at its beginning and close, are shown below :

Denominations.	Outstanding June 30, 1885.	Issued.		Redeemed.		Outstanding June 30, 1886.
		During fiscal year.	To June 30, 1886.	During fiscal year.	To June 30, 1886.	
Twenty dollars	\$12,343,700	\$640,000	\$15,920,000	\$1,007,290	\$3,943,330	\$11,976,470
Fifty dollars	10,443,800	100,000	13,300,000	825,845	3,582,045	9,717,955
One hundred dollars ..	9,527,800	100,000	12,200,000	683,900	3,256,100	8,943,900
Five hundred dollars ..	14,120,500	200,000	17,300,000	950,000	3,020,500	13,370,500
One thousand dollars ..	22,120,000	.....	20,000,000	3,842,000	7,722,000	18,278,000
Five thousand dollars ..	14,085,000	.....	22,500,000	655,000	9,670,000	13,430,000
Ten thousand dollars ..	55,120,000	.....	85,000,000	2,090,000	31,970,000	53,030,000
Total	137,760,800	1,040,000	192,220,000	10,054,033	63,473,175	128,746,825

The remarks in regard to currency certificates apply with equal force to the issue of these certificates, with the further objection that the accumulation of the large amounts held in the Treasury renders it the constant object of attack, and at no remote day a great source of danger to the best financial interests of the country. If, as the result of the withdrawal of all notes under the denomination of ten dollars, the gold now in the Treasury were absorbed, as well as a subsidiary silver currency, into the general circulation of the country, it would render unnecessary the costly methods at present in use, and materially strengthen the credit of the currency now outstanding. It is upon the paper money, or credit system, of a country that the first effects of war, bad crops, or disastrous accidents fall, and no better guarantee of the stability of the monetary affairs of a nation has hitherto been found than the existence of a large mass of metallic moneys among the people, which can be drawn upon to sustain the credit of its paper indebtedness in time of need.

SILVER CERTIFICATES.

The amount of silver certificates nominally outstanding at the close of the fiscal year was \$115,977,675, of which amount the Treasury held \$27,861,450, leaving \$88,116,225 in actual circulation; a decrease of \$13,414,721 during the year. The table below gives the amount of those redeemed and issued during the year:

Denomination.	Outstanding June 30, 1885.	Issued.		Redeemed.		Outstanding June 30, 1886.
		During fis- cal year.	To June 30, 1886.	During fis- cal year.	To June 30, 1886.	
Ten dollars	\$51,747,127	\$3,800,000	\$81,834,000	\$5,277,740	\$31,564,613	\$50,269,387
Twenty dollars	52,010,904	800,000	73,986,000	7,853,336	29,028,372	44,957,628
Fifty dollars	7,654,035	.....	11,050,000	269,195	3,665,160	7,384,840
One hundred dollars	9,876,520	.....	14,140,000	267,700	4,529,180	9,610,820
Five hundred dollars	8,910,000	.....	13,650,000	7,675,000	11,815,000	1,835,000
One thousand dollars	9,701,000	.....	23,490,000	7,781,000	21,570,000	1,920,000
Total	139,901,646	4,600,000	218,150,000	28,523,971	102,172,325	115,977,675

The amount nominally outstanding on June 30, 1886, has since been added to by the demands of reviving business to the extent of \$3,670,427, the amount held by the Treasury decreased to \$14,137,285, and the amount now in circulation, November 30, is \$105,519,817.

To measure the difference between the redemption of this class of money in times of depression and in and through a revival of business, I beg to call your attention to the table of percentages of kinds of money received through the customs on page 37 of this report. At the close of 1885, with an actual circulation of \$101,530,946 of silver certificates, the custom-house receipts of this kind of money at New York were 35.6 per cent. of the total receipts at that point. At present, with a circulation of \$105,519,817 and with larger customs receipts, the percentage received at New York is 12.2 per cent. With due care, regard being had to the denominations in which these notes are issued during the present revival of business, their use will be largely increased. This is true especially of the one, two, and five dollar notes, so far as the sphere of usefulness in business for these denominations permits; but any attempt to force them, or, in fact, any particular denomination, into use results in the discredit of the notes so issued and their rapid return into the Treasury. The only present limitation upon the issue of these denominations is that of the physical labor necessary to prepare and put them in circulation. In order to do this as rapidly as possible it will be necessary to increase the force at the Bureau of Engraving and Printing and at this office to the extent necessary to produce these notes in sufficient amount to meet the public demand.

STANDARD SILVER DOLLARS.

The following table shows the amount of silver dollars coined, on hand, distributed, and outstanding at the close of each year since the enactment of the law authorizing their coinage. It also shows the percentage of the distribution to the annual coinage, and of the outstanding to the total amount coined.

Fiscal year ending June 30—	Annual coinage.	Total coinage.	On hand at close of year.	Net distribution during year.	Outstanding at close of year.	Percentage of distribution to annual coinage.	Percentage of outstanding to total coinage.
1878	\$8,573,500	\$8,573,500	\$7,718,357	\$855,143	\$855,143	9.9	9.9
1879	27,227,500	35,801,000	28,858,589	6,587,268	7,442,411	24.2	20.8
1880	27,923,750	63,724,750	45,108,296	11,184,048	18,626,454	40	29.2
1881	27,637,955	91,362,705	63,249,300	9,406,961	28,123,405	35.8	30.8
1882	27,772,076	119,144,780	67,524,181	8,407,183	31,620,598	12.6	26.5
1883	28,111,119	147,255,899	112,362,510	3,272,781	34,893,389	11.6	23.7
1884	28,099,930	175,355,829	135,810,368	4,052,072	39,545,461	16.5	22.6
1885	28,528,532	203,884,361	163,535,854	—1,190,944	28,848,527	.....	18.8
1886	29,838,905	233,723,266	181,253,566	14,121,193	52,469,720	47.3	22.4

The following table shows the amount of standard silver dollars and of fractional silver coin in each office of the Treasury on September 30, 1886, and on that date last year:

Office.	Standard silver dollars.		Fractional silver coin.	
	Sept. 30, 1885.	Sept. 30, 1886.	Sept. 30, 1885.	Sept. 30, 1886.
Treasury United States, Washington.....	\$14, 334, 243	\$51, 048, 674	\$264, 274 28	\$2, 080, 907 84
Assistant Treasurer United States:				
Baltimore.....	8, 380, 708	3, 070, 791	538, 935 70	403, 299 25
Boston.....	687, 805	251, 858	1, 393, 974 00	822, 004 10
Chicago.....	7, 322, 000	2, 139, 412	4, 147, 010 00	1, 571, 771 00
Cincinnati.....	737, 000	50, 500	149, 725 00	49, 740 00
New Orleans.....	10, 112, 004	1, 272, 023	719, 901 80	537, 023 80
New York.....	28, 900, 000	26, 704, 000	2, 954, 122 32	9, 283, 490 13
Philadelphia.....	10, 009, 330	10, 436, 534	3, 631, 380 00	2, 894, 900 13
San Francisco.....	21, 000, 000	22, 941, 297	7, 496, 281 80	7, 350, 100 59
Saint Louis.....	10, 119, 400	10, 076, 192	2, 237, 080 00	1, 801, 418 00
United States Mint:				
Denver.....			98	90
Carson City.....	18, 080		7, 047 76	
New Orleans.....	4, 042, 165	4, 100, 368	62	78
Philadelphia.....	14, 441, 005	30, 771, 052	51, 523 89	18, 508 27
San Francisco.....	20, 404, 002	18, 397, 107	11, 452 74	4, 030 87
United States Assay-office:				
Baltimore.....				
Charlotte.....				
Helena.....				
New York.....	1, 624	4, 725	48 45	274 20
Saint Louis.....	12		17 50	20 50
Total.....	154, 509, 380	181, 264, 093	23, 602, 776 84	26, 820, 499 36
Add amount in transit between offices.....	11, 069, 000	531		55, 000 80
	165, 578, 380	181, 264, 624	23, 602, 776 84	26, 881, 500 16
Deduct amount required to fill orders unpaid.....	147, 297	103, 463	76, 425 40	34, 887 40
Total.....	165, 431, 083	181, 161, 161	23, 526, 351 44	26, 846, 612 76

The amount of standard silver dollars coined, on hand, distributed, and outstanding, at the close of the year, and up to November 30, is shown by the tables on pages 96 and 97 in the Appendix. The percentage of distribution and cost is also given. As will appear by these tables, there is now in circulation the sum of \$61,761,448, the largest sum yet attained in the circulation of this kind of currency. From the changes observed in the tables above referred to it can safely be deduced that the maximum of circulation has been obtained, or if not fully attained, will be by the time this report reaches Congress. I am of the opinion that \$65,000,000 is the extreme limit which may be obtained. It certainly cannot be maintained at that sum when the new silver \$1 and \$2 certificates are in full supply. A return to the Treasury of at least one-half of the amount now in circulation must be looked for. Assuming the correctness of these views, and the experience of the Treasury for the past year fully sustains me in expressing these opinions, the sum now and to be spent in the continued purchase of silver bullion and its coinage into standard silver dollars leads one to ask whether, if the further purchase of the silver bullion be determined upon, the coinage might not cease, and the sum which this costs be saved to the public Treasury? The amount expended so far upon the coinage of the silver dollar, outside of the cost and consequent loss upon the purchase of the bullion, amounts to \$4,933,467.72. All of the cost, in excess, say, of the cost of the coinage of the sum of \$75,000,000, represents pure loss, and amounts, at 2 cents per dollar, the cost of these coins, to \$3,433,467.72. To add to this loss would seem unnecessary, and the sum could be expended in the purchase of that amount more of the silver bullion. The adoption of this plan would at least have the merit of adding just so much to the credit of the silver profit fund. The aggregate amount of these coins moved by the Treasury to September 30, 1886, has reached the sum of \$722,-

040,141. The amount transferred to and from the Treasury and sub-treasuries for purposes of payment and shipment was \$90,855,000; the sum distributed through the country by payments over the counter amounted to \$145,732,722, and the shipments by express amounted to \$158,336,195. The expenses for transportation have amounted to \$774,758.92, or \$1.96 per \$1,000 handled. The amount coined from July 1, 1855, to September 30, 1886, was \$37,185,905; the amount moved from the mints during the same period was \$13,768,802; the difference amounting to \$23,417,103 has been uselessly added to the coinage of the country. The cost of transportation is greater from these offices, and not a dollar of the amounts moved need have been transported, as the supply in the sub-treasuries is ample for all the requirements of the public. The shipments from the mints were made in order to save as much of the appropriation for the transfer and free shipment of silver coin as possible, as the cost of such shipments is borne by the silver profit fund when the shipments are made from these offices.

The cost to the Government for transportation of these coins averages \$1.96 per \$1,000, and the cost to the people of their return to the Treasury averages, say, \$2.54 per \$1,000. The average cost of transportation to the Government of the silver certificates per \$1,000 is, say, 50 cents; the cost to the people, say, \$1.25; a saving of \$2.75 per \$1,000; a strong argument in favor of the issue of such amount of these certificates, as the business of the country will permit to be carried on without disturbing its gold revenues or interfering with the maintenance of a strict parity between the two metals. The amount of silver dollars coined to date is \$246,673,386; the amount of gold coin and bullion on hand is \$254,450,853.57. The cost of the \$246,673,386 is \$216,049,269.20; the present value \$188,014,354.81, showing an actual loss of \$28,034,914.39. The Bank of France to-day is in this position: It holds in its cash at par \$220,273,860.62 in silver; its present value at par of exchange, exclusive of abrasion, is \$166,509,691.21; showing a loss of its entire capital and surplus which amounts to, say, \$44,028,223, and \$10,000,000 in addition if called upon to liquidate its affairs to-day.

FRACTIONAL SILVER COIN.

The denominations of the fractional silver coin held in each office of the Treasury on September 30, 1886, were as follows:

In office of—	Fifty-cent pieces.	Twenty-five-cent pieces.	Twenty-cent pieces.	Ten-cent pieces.	Five-cent pieces.	Three-cent pieces.	Unassorted.
Treasurer U. S., Washington..	\$1, 005, 275 00	\$473, 075 00	\$11 60	\$2, 500 00	\$104 70	\$34 04	\$8, 907 50
Assistant Treasurer U. S. :							
Baltimore	363, 087 00	87, 506 25	34 00	1, 268 00	419 00	78 00	907 00
Boston	643, 537 00	167, 826 00	200 00	5, 101 10	400 00	.....	4, 940 00
Chicago	1, 053, 000 00	508, 000 00	.....	9, 000 00	.....	.....	1, 771 00
Cincinnati....	22, 185 00	21, 205 00	70 00	5, 860 00	271 00	59 00	.....
New Orleans ..	520, 187 50	14, 212 75	21 80	2, 580 90	.....	20 85	.....
New York ...	6, 430, 000 00	2, 782, 000 00	.....	1, 000 00	.....	.....	70, 400 13
Philadelphia ..	1, 716, 601 00	1, 166, 461 00	4 00	4, 212 00	479 00	48 00	7, 014 13
San Francisco	7, 126, 126 00	219, 000 00	300 00	800 00	3, 000 00	874 59	.....
Saint Louis...	1, 539, 601 00	250, 195 00	305 00	10, 758 00	367 00	.....	192 00
U. S. Mint:							
Denver.....	.....	.....	.....	.....	.....	.....	90
Philadelphia ..	3, 353 50	8, 787 25	.....	6, 367 53	.....	.....	.....
New Orleans ..	.....	.....	.....	.....	.....	.....	78
San Francisco	160 00	1, 895 25	.....	1, 975 62	.....	.....	.....
U. S. Assay-office:							
New York....	130 00	130 00	.....	14 20	.....	.....	.....
Saint Louis...	.....	.....	.....	.....	.....	.....	20 50
In transit between offices .....	.....	50, 000 00	.....	5, 000 80	.....	.....	.....
Total	21, 023, 333 00	5, 700, 383 50	946 40	56, 438 14	5, 040 70	1, 114 48	91, 243 91

The amount of fractional silver coin held by the Treasury on June 30, 1885, was \$31,236,899.49, which amount decreased during the past fiscal year to the sum of \$28,904,681.66. The amount held November 30 is \$25,808,067.32, showing an increased demand for these coins, caused by the revival of business. Part of this increase will be lost during the months of January and February, owing to the return of this kind of money through the operation of the law authorizing its redemption in lawful money. The amount shipped through the country during the fiscal year was \$6,723,249.31, the amount paid out at the sub-treasuries was \$25,283,602.14, the amount received \$22,354,772.75. This amount cost \$18,310 for shipment by the Government, and the amount deposited in the sub-treasuries represents a cost in labor of \$24,000. The labor of twenty men has been employed during the year in counting, assorting, and shipping this money, and as long as this is done at the expense of the United States Treasury, so long will five times the amount necessary to do the business of the country be ordered from the respective sub-treasuries. If left to the operation of the natural laws of trade these coins would, when accumulated at points in excess of present need, fall to a slight discount, be purchased and remitted to those who desire them, the discount paying a part, if not the whole, of the expense; and except when mutilated or defaced, would not find their way back to the Treasury. The redemption of these coins, as now carried on, means that the railroads, ferries, theaters, ice-cream saloons, dram shops, etc., have the coins received in the course of their business carefully counted and assorted at the sub-treasuries at the Government expense. As the beneficiaries are not charitable institutions, there would seem to be no good reason why taxes should be imposed upon a whole people for their exclusive benefit. Referring to remarks under the head of "Standard Silver Dollars" and the opinion expressed therein as to the limitation of the issue of that coin for the use of the people as currency, it is suggested that an attempt be made to utilize silver as a purely fractional currency by giving more weight and beauty to the pieces, including in the coinage a five-cent silver piece. If the attempt were made it would be found, withdrawing the \$1 and \$2 paper money being granted, that at least \$125,000,000 of fractional silver could be carried, and an annual demand be created of from three to five million dollars of the like coin for shipment abroad. This demand would steadily increase as the new coins became known.

MINOR COIN.

At the close of the fiscal year the Treasury held \$377,814 in minor coins, a decrease during the year of \$490,651.64. The amount nominally on hand November 30 was \$163,584.53, but of this \$145,236.16 was uncurrent and held by the mint for recoinage, leaving actually available \$18,348.37.

The following table shows the amount of each denomination of minor coin held in the several Treasury offices on September 30, 1886.

In office of—	Five cents.	Three cents.	Two cents.	One cent.	Unassorted.	Total.
Treasurer United States, Washington	\$730 00	\$1,089 00	.....	\$1,017 00	\$946 96	\$3,782 96
Assistant Treasurer United States:						
Baltimore.....	2,700 00	80 00	\$10 00	365 47	.....	3,105 47
Boston.....	.....	300 00	.....	240 19	112 00	652 19
Chicago.....	200 00	.....	1 04	80 01	.....	281 06
Cincinnati.....	721 00	139 00	25 00	30 00	.....	915 00
New Orleans.....	906 45	03	02	794 91	.....	1,701 41
New York.....	4,494 00	210 00	.....	470 00	198 84	5,372 84
Philadelphia.....	240 00	12 00	41 00	234 19	.....	527 19
San Francisco.....	5,850 00	1,260 00	150 00	540 47	.....	7,800 47
Saint Louis.....	50 00	11 88	86	72 21	5 13	140 08
United States Mint:						
Denver.....	.....	.....	.....	.....	08	08
Philadelphia.....	836 90	.....	.....	9,240 00	73,332 00	83,408 90
United States Assay-office:						
New York.....	.....	.....	.....	.....	13 26	13 26
Saint Louis.....	.....	.....	.....	.....	2 17	2 17
In transit between offices...	4,430 85	145,676 93	22,553 14	15,575 29	82 48	188,318 69
Total	21,159 20	148,728 84	22,781 06	28,659 74	74,692 92	296,021 76

The method of the redemption of minor coin is objectionable, as it compels the recounting and reissue of these coins at Government expense. So far as the experience of the present Treasurer has any worth it is found that the only practicable control of the tendency to constant waste is, that while granting all proper requests, such as are granted shall be at the cost of the applicants.

RECOINAGE OF UNCURRENT COINS.

Under the appropriation of \$10,000 for the recoinage of uncurrent coins, fractional silver of the face value of \$159,854.25 was recoined into dimes during the year, at a net loss of \$9,743.12.

Great complaints have been made during the current year as to the inadequacy of the supply of small silver coins and 5 and 1 cent pieces. This is due to the omission on the part of Congress to grant a contingent fund to the Treasury sufficient to re-coin the mutilated and defaced coins presented during each year. The demand for these coins can neither be governed or regulated, and the Treasury should be prepared to meet any exigency of this kind from funds within its control, due report being made to Congress of the expenditures under this head.

FRACTIONAL CURRENCY.

The redemption of fractional currency during the year amounted to \$10,088.36, leaving an apparent amount outstanding at the close of the year of \$15,330,025.85.

Since 1876, when the issue ceased, the redemptions have been as follows:

Year.	Amount.	Year.	Amount.
1877.....	\$14,043,458 05	1882.....	\$58,705 56
1878.....	3,855,368 57	1883.....	46,556 96
1879.....	705,158 66	1884.....	20,629 50
1880.....	251,717 41	1885.....	15,885 43
1881.....	109,001 05	1886.....	10,088 36

The total amount of the various issues of fractional currency paid out by the Treasury, the date when the issue ceased, the amount outstanding at the close of the fiscal year, as shown by the Treasurer's books, and the percentage of the outstanding to the amount issued, is shown in the following table:

When issue began.	Date when issue ceased.	Duration of issue.	Total issued.	Outstanding June 30, 1866.	Percentage outstanding to amount issued.
August 21, 1862 ..	May 27, 1863	9 mos., 6 days.	\$20, 215, 635 00	\$4, 281, 255 17	21. 2
October 10, 1863 ..	Feb. 23, 1867	3 yrs., 4 mos., 13 days.	23, 164, 483 65	3, 106, 315 31	13. 4
December 5, 1864 ..	Apr. 16, 1869	4 yrs., 4 mos., 11 days.	86, 115, 028 80	2, 983, 271 47	3. 5
July 14, 1869	Feb. 16, 1875	5 yrs., 7 mos., 2 days.	170, 567, 032 00	3, 689, 432 14	2. 1
February 29, 1874 ..	Feb. 15, 1876	1 yr., 11 mos., 19 days.	62, 661, 900 00	1, 269, 751 76	2. 0
Total : .....	.....	.....	368, 724, 079 45	13, 330, 025 85	4. 2

The percentage of the amount outstanding to the amount issued of United States and national-bank notes issued prior to 1875 is given in the following table, in order that comparison may be made with the amount reported to be outstanding of the earlier issues of fractional currency :

Description.	Date when issue began.	Date when issue ceased.	Total issued.	Outstanding June 30, 1866.	Per cent. of outstanding to issue.
<i>United States notes.</i>					
<i>ALL DENOMINATIONS.</i>					
New issue	Apr. 2, 1862	Apr. 19, 1869	\$669, 321, 676	\$0, 252, 357 10	1. 4
Issue of 1869	Oct. 9, 1869	July 25, 1874	493, 828, 132	22, 943, 730 30	4. 6
Issue of 1874	July 13, 1874	Sept. 13, 1875	87, 968, 000	5, 983, 595 10	6. 8
Issue of 1875	July 20, 1875	June 20, 1879	190, 668, 000	19, 146, 943 40	10. 0
			1, 441, 805, 808	57, 326, 625 00	4. 0
<i>ONES.</i>					
New issue	Apr. 2, 1862	Apr. 19, 1869	28, 351, 348	787, 042 15	2. 8
Issue of 1869	Oct. 9, 1869	July 25, 1874	42, 456, 812	444, 572 85	1. 0
Issue of 1874	July 13, 1874	Sept. 13, 1875	18, 988, 000	171, 228 90	0. 9
Issue of 1875	July 20, 1875	June 20, 1879	26, 212, 000	339, 157 70	1. 3
			116, 008, 160	1, 742, 001 70	1. 5
<i>TWOS.</i>					
New issue	Apr. 2, 1862	Apr. 19, 1869	84, 071, 128	606, 003 20	1. 8
Issue of 1869	Oct. 9, 1869	July 25, 1874	50, 511, 920	441, 227 60	0. 9
Issue of 1874	July 13, 1874	Sept. 13, 1875	16, 520, 000	137, 696 20	0. 8
Issue of 1875	July 20, 1875	June 20, 1879	23, 036, 000	379, 944 20	1. 6
			124, 139, 048	1, 561, 871 20	1. 3
<i>National-bank notes.</i>					
Ones	Apr. 1, 1865	Jan. 1, 1879	23, 167, 677	416, 482 00	1. 8
Twos	Apr. 1, 1865	Jan. 1, 1879	15, 495, 038	220, 796 00	1. 4

A further comparison of the number of pieces of fractional currency purporting to have been issued, and to be still outstanding, with the number of pieces of one and two dollar United States notes and national-bank notes, which latter notes were in active circulation and use during about the same period of time, shows so great a disproportion as to attract attention and comment as to a possible error in the accounts

of the Treasury in regard to the issue and redemption of the fractional currency.

Description.	Issued.		Outstanding.		Per cent. of outstand- ing to issue.
	Amount.	Number of pieces.	Amount.	Number of pieces.	
<i>Fractional currency.</i>					
Three cents	\$601,923 90	20,064,130	\$90,285 48	3,000,516	1.5
Five cents	5,694,717 85	113,894,357	1,859,234 12	37,184,682	32.6
Ten cents	82,198,456 80	821,984,568	5,075,660 44	50,756,604	6.1
Fifteen cents	5,305,568 40	35,370,450	241,446 62	1,609,644	4.5
Twenty-five cents	139,031,482 00	550,125,928	4,303,642 93	17,214,572	3.1
Fifty cents	135,691,930 50	271,783,861	3,759,756 20	7,519,512	2.8
	368,724,079 45	1,819,223,300	15,330,025 85	117,294,530	4.2
<i>United States and na- tional-bank notes.</i>					
One dollar	139,175,837 00	139,175,837	2,158,483 00	2,158,483	1.6
Two dollars	139,634,086 00	69,817,043	1,785,037 00	892,534	1.3
	278,809,923 00	208,992,880	3,944,150 00	3,051,317	1.4

MUTILATED AND COUNTERFEIT CURRENCY.

The amount of \$4,066 was deducted from the face value of United States notes redeemed during the year, on account of mutilations; on fractional currency redeemed the deductions amounted to \$50.62; on silver certificates to \$339, and on gold certificates to \$15.

There were detected in remittances of notes received for redemption 269 counterfeit United States notes and 233 national-bank notes. The denominations of these notes were as follows:

Denomination.	United States notes.	National- bank notes.
One dollar	\$28	.....
Two dollars	42	\$26
Five dollars	390	600
Ten dollars	720	600
Twenty dollars	800	630
Fifty dollars	1,300	100
One hundred dollars	400	400
	3,680	2,406

There was also detected counterfeit fractional currency of the nominal value of \$186.70.

Counterfeit silver coins were detected in the several Treasury offices during the fiscal year as follows:

Description.	Amount re- ceived.	Number of counter- feits.
Standard dollars	\$48,881,184	2,829
Half-dollars	7,033,456	1,037
Quarter-dollars	5,340,262	988

THE POSTAL REVENUES.

The amount received from this source into the Treasury was \$26,593,885.64; the amount received by the Postmaster-General's report was \$52,997,135.26; the amount received by the Treasury being

about one-half of the whole receipts. While the country was without good roads, telegraphs, and railroads, the present system, or lack of system, was possibly defensible. There is nothing at present to be said in its favor, and a system should be devised which would make all the revenue of the country, from whatever source, find its way into the Treasury, and be disbursed through the regular channels, and with proper supervision and accountability.

SPEAKER'S CERTIFICATES.

The appropriation for the payment of compensation and mileage of members of the House of Representatives for the last fiscal year amounted to \$1,805,624.

The disbursement of this very large sum of money is now made by the Treasurer of the United States upon certificates signed by the Speaker of the House, to which are attached receipts of the members in whose names the certificates are drawn.

Under the present law and method of payment the Treasurer is held responsible by the accounting officers for the payment of vouchers the correctness of which he has no means of verifying, and which payments have been made by him upon express requirements of law providing that the Speaker's certificate shall be conclusive upon all officers of the Government.

It is again respectfully requested that Congress be asked to provide some other way of making such payments.

CLEARING-HOUSE TRANSACTIONS.

The usual tables, showing the transactions of the sub-treasury at New York with the clearing-house in that city, are here presented:

Date.	Checks sent to the clearing-house.	Checks received from the clearing-house.	Balances due the assistant treasurer.	Balances due the clearing house.
Fiscal year ending June 30, 1884....	\$116,666,000 26	\$205,541,948 32	\$1,331,880 02	\$180,207,828 08
Fiscal year ending June 30, 1885.....	109,420,072 25	278,830,720 11	694,284 08	170,104,931 94
1885.				
July.....	10,066,644 51	23,830,804 82	12,011 10	13,777,071 41
August.....	9,259,193 85	17,022,142 40	38,620 67	7,801,589 12
September.....	12,594,235 36	19,512,363 87	150,973 51	7,099,102 02
October.....	13,819,131 62	20,915,227 66	843,999 03	7,940,095 07
November.....	9,539,233 94	14,720,003 28	273,584 22	5,454,353 56
December.....	10,760,312 50	21,595,770 13	.....	10,826,457 63
1886.				
January.....	8,955,277 57	28,589,627 09	.....	19,634,350 42
February.....	10,739,318 85	24,118,923 92	44,800 78	13,424,495 85
March.....	11,617,293 85	27,514,302 98	.....	15,927,009 13
April.....	9,020,067 86	26,880,394 15	.....	17,860,326 79
May.....	9,737,500 61	22,646,906 53	.....	12,909,405 92
June.....	9,665,310 41	29,449,019 57	278,300 55	20,062,009 71
Fiscal year ending June 30, 1886.....	125,782,520 53	276,855,487 30	1,643,279 86	152,716,246 63
July.....	9,870,226 58	28,722,219 31	.....	18,851,992 73
August.....	10,728,216 72	20,666,782 11	.....	9,938,571 39
September.....	11,033,624 86	40,289,060 00	.....	29,255,435 64
October.....	10,562,348 44	38,427,715 67	.....	27,865,367 28
November.....	10,570,163 76	32,855,120 89	.....	21,784,957 18
Total for three years and five months.....	404,633,166 90	1,011,680,053 71	3,669,443 96	610,725,330 77

RECEIPTS FROM CUSTOMS AT NEW YORK.

In continuation of tables presented in the reports of the Treasurer for the past three years, the kinds of money received in payment of duties on imports at the port of New York are shown in the table below, covering the period from July 1, 1883, to November 30, 1886:

Date.	United States Notes.	Per Ct.	Gold Coin.	Per Ct.	Gold Certificates.	Per Ct.	Silver Certificates.	Per Ct.	Silver Coin.	Per Ct.	Total duties on imports, port of New York.
Fiscal year ending June 30, 1884	\$11,791,000	8.8	\$2,556,000	2.7	\$88,750,000	68.4	\$22,482,000	22.0	\$134,000	0.1	\$123,713,000
Fiscal year ending June 30, 1885	33,161,000	28.9	1,544,000	1.2	42,779,000	34.1	44,660,000	35.6	158,000	0.1	125,302,000
1885.											
July	5,508,000	46.6	93,000	0.8	3,408,000	28.8	2,790,000	23.6	22,000	0.2	11,821,000
August	4,848,000	38.2	98,000	0.8	6,017,000	47.4	1,716,000	13.5	35,500	0.3	12,700,000
September	3,130,000	25.8	81,000	0.7	7,718,000	63.4	1,190,000	9.8	29,000	0.3	12,167,000
October	1,811,000	10.6	88,000	0.8	7,823,000	70.8	1,216,000	11.3	35,000	0.3	10,771,000
November	2,478,000	28.4	80,500	0.9	4,965,000	58.0	1,173,000	13.4	23,500	0.4	8,730,000
December	2,455,000	24.7	71,000	0.7	6,008,000	60.5	1,867,000	18.8	34,000	0.3	9,985,000
1886.											
January	3,301,000	31.6	65,500	0.6	5,321,000	53.3	1,622,000	14.8	29,500	0.3	10,339,000
February	5,537,000	47.3	49,000	0.4	5,003,000	43.2	1,027,000	8.8	28,000	0.2	11,704,000
March	7,310,000	58.4	71,500	0.6	3,941,000	31.5	1,151,000	9.2	36,500	0.3	12,512,000
April	6,914,000	66.2	108,500	1.0	2,113,000	20.2	1,278,000	12.8	33,500	0.3	10,442,000
May	6,448,000	71.4	73,500	0.8	1,098,000	12.2	1,278,000	15.3	31,500	0.3	9,029,000
June	9,712,000	61.7	80,500	0.7	568,000	4.6	1,496,000	12.0	30,500	0.2	11,887,000
Fiscal year ending June 30, 1886	59,549,000	44.9	941,000	0.7	54,343,000	41.0	17,404,000	13.1	390,500	0.3	132,627,000
July	10,680,000	84.8	92,500	0.7	880,000	2.9	1,418,000	11.8	40,500	0.3	12,006,000
August	10,906,000	73.5	98,000	0.7	2,456,000	18.5	1,314,000	8.9	60,000	0.4	14,834,000
September	2,915,000	22.5	74,500	0.6	8,716,000	67.3	1,202,000	9.2	30,500	0.3	12,944,000
October	1,878,000	16.2	83,500	0.7	8,192,000	70.8	1,393,000	12.0	32,500	0.3	11,583,000
November	1,748,000	17.1	115,500	1.1	7,049,000	69.3	1,230,000	12.2	28,500	0.3	10,175,000
Total for three years and fractions	135,627,000	29.9	6,505,000	1.4	212,654,000	46.9	98,112,000	21.6	886,500	0.2	453,784,500

The following is a summary of the table:

Received in—	Per cent.
Gold Coin	1.4
Gold Certificates	46.9
Silver Coin	0.2
Silver Certificates	21.6
United States Notes	29.9

Total

The amount of silver certificates in circulation on the dates stated was as follows:

Date.	Silver certificates.		Percentages of each kind of money received from customs at New York.					
	*Outstanding at the close of each month.	Decrease during the month.	United States notes.	Gold certificates.	Total gold receipts.	Increase.	Silver certificates.	Decrease.
1886.								
April 30	\$90,733,141		68.2	20.2	88.4		12.3	
May 29	89,184,129	\$1,549,012	71.4	12.2	83.6	12.8	15.3	12.6
June 30	88,116,225	1,067,904	81.7	4.8	86.5	2.0	12.6	2.7
July 31	87,564,044	552,181	84.8	2.8	87.7	1.2	31.3	1.3
August 31	89,021,700	11,457,716	73.5	16.5	90.0	2.3	6.9	2.4
September 30	95,387,112	16,365,352	22.5	67.3	89.8	20.2	0.3	10.4
October 30	100,306,600	14,919,688	16.2	70.8	87.0	12.8	12.0	12.7
November 30	105,519,817	15,213,217	17.1	69.3	86.4	10.6	12.2	10.9

* From latest returns received.

{ Increase.

{ Decrease.

In the Appendix, page 91, will be found a table showing by months the kinds of money received from April, 1878, in the custom-house at New York. There will also be found on page 62 a table of the Treasury receipts and payments for the year, and the kinds of money in which such receipts and payments were made.

DEPOSITARY BANKS.

Public moneys amounting to \$123,592,221.68 were during the year deposited with national banks designated as depositaries. The balances held at the close of the year to the credit of the Treasurer amounted to \$14,036,632.18, and to the credit of disbursing officers, to \$2,615,753.11.

Bonds of the United States amounting to \$19,659,900 were held by the Treasury to secure the safe-keeping and prompt payment of these funds.

One hundred and sixty national banks acted as depositaries during the year, receiving the moneys from collecting officers of the Government, thus saving the risk and expense of transportation to Treasury offices, and disbursing the same on drafts of the Treasurer. A more extended use of the banks as depositaries would result in a large saving to the Government, and very much lessen the chances of loss from peculation and frauds in the conduct of the operations of the Treasury, as the proper margin of security in United States bonds is a matter of constant supervision by the Treasurer. No loss has resulted in this class of deposits for the past eighteen years, although a number of failures have taken place among the depositary banks.

The following table presents the transactions with depositary banks for the twenty-two years in which they have been employed by the Treasury:

Fiscal year.	Receipts.	Funds transferred to depositary banks.	Funds transferred to Treasury by depositary banks.	Drafts drawn on depositary banks.	Balance at close of the year.
1854	\$153,293,168 71	8816,000 00	865,507,674 08	\$38,726,895 88	\$30,876,738 75
1855	987,564,639 14	8,110,294 70	583,097,912 72	413,887,767 81	36,065,992 06
1856	497,566,676 42	13,323,972 62	893,085,565 05	149,772,756 11	31,298,319 24
1857	351,737,083 83	8,405,003 63	331,039,872 57	87,218,812 70	26,182,821 47
1858	225,244,144 75	9,404,392 00	215,311,400 80	22,218,187 92	23,301,700 61
1859	105,160,573 67	10,052,199 44	114,748,877 24	14,890,463 75	8,875,141 73
1860	120,084,041 79	2,466,521 06	111,123,926 16	11,818,228 61	8,483,549 79
1861	99,299,840 85	2,613,129 45	89,428,544 04	13,700,961 01	7,197,015 04
1862	106,104,855 16	3,050,444 05	94,938,803 76	13,635,837 49	7,777,873 06
1863	100,092,743 96	9,001,842 49	108,089,788 76	16,110,519 07	82,185,158 64
1864	91,108,846 70	2,720,958 81	131,809,112 57	13,364,554 82	7,790,292 06
1865	98,228,249 53	1,737,445 00	82,184,304 05	13,657,078 25	11,914,004 89
1866	97,402,227 67	2,445,451 49	89,981,146 99	18,909,616 83	7,870,920 13
1867	106,470,261 23	2,353,196 29	94,276,400 35	14,462,200 86	7,555,776 41
1868	99,781,033 48	2,385,920 38	90,177,963 35	12,606,870 00	6,937,916 33
1869	109,397,525 67	6,800,489 06	100,498,469 29	15,514,058 34	7,183,403 42
1870	119,493,171 84	6,489,634 17	109,641,232 64	15,525,023 03	7,999,973 66
1871	131,820,002 20	6,646,092 46	118,143,724 01	18,348,772 82	8,933,550 79
1872	143,261,541 41	6,256,574 29	129,131,305 07	18,709,928 56	9,610,432 86
1873	145,974,256 86	6,292,840 23	132,075,358 80	18,771,472 81	10,030,698 33
1874	129,100,449 35	6,501,161 18	116,227,722 17	17,688,442 52	10,716,144 17
1875	119,050,058 04	4,798,762 35	105,952,609 09	17,633,235 03	10,985,141 34
1876	123,592,221 68	8,786,546 56	112,863,815 24	10,464,463 15	14,036,632 18
Total	4,230,445,574 83	127,781,792 29	3,512,904,868 21	931,196,316 75	.....

PAPERS ACCOMPANYING THE
PACIFIC RAILROAD SINKING FUNDS.

At the close of the fiscal year United States bonds were held in this office for account of the Pacific Railroad sinking funds, established by the act of May 7, 1878 (20 Statutes, 56), as follows:

United States bonds.	For Union Pacific Rail- road Com- pany.	For Central Pacific Rail- road Com- pany.	Total.
Bonds issued to Pacific railroads, 6 per cents.....	\$361, 000	\$444, 000	\$805, 000
Funded loan of 1907, 4 per cents.....	4, 218, 650	199, 100	4, 417, 750
Loan of July 12, 1882, 8 per cents.....	456, 450	194, 900	651, 350
Total.....	5, 036, 100	838, 000	5, 874, 100

Four per cent. bonds to the amount of \$1,095,000 were added to the account of the Union Pacific Railroad, and \$510,000 called 3 per cent. bonds were withdrawn for redemption, and the proceeds thereof deposited in the Treasury to the credit of said fund.

Three per cent. bonds to the amount of \$320,000 were added to the account of the Central Pacific Railroad, and \$1,220,000 called 3 per cent. bonds were withdrawn for redemption, and the proceeds thereof deposited in the Treasury to the credit of said fund, making bonds and cash to the credit of the respective funds as follows:

	Bonds.	Cash.	Total.
Union Pacific	\$5, 036, 100	\$263, 631. 72	\$5, 299, 731. 72
Central Pacific	838, 000	2, 152, 397. 56	2, 990, 397. 56

TRUST FUNDS.

THE INDIAN TRUST FUND.

The Treasurer of the United States, by the act of June 10, 1876 (19 Statutes, 58), is the custodian of the Indian trust fund, for the Secretary of the Interior, trustee. The amount of the fund at the close of the fiscal year was \$1,800,016.83½, as shown by the following table:

Class of bonds.	Registered.	Coupon.	Total.
<i>State and canal bonds.</i>			
Arkansas—Funded debt		\$168, 000 00	\$168, 000 00
Florida—State stocks		132, 000 00	132, 000 00
Indiana—Wabash and Erie Canal bonds.....		2, 000 00	2, 000 00
Louisiana—State stocks		37, 000 00	37, 000 00
Maryland—State stocks	\$8, 350 17		8, 350 17
North Carolina—State stocks.....		192, 000 00	192, 000 00
South Carolina—State stocks.....		125, 000 00	125, 000 00
Tennessee—State stocks	191, 066 66½	123, 000 00	314, 066 66½
Virginia—State stocks	540, 000 00		540, 000 00
Virginia—Chesapeake and Ohio Canal bonds.....		1, 000 00	1, 000 00
<i>United States bonds.</i>			
Bonds issued to Pacific railroads	280, 000 00		280, 000 00
Total.....	1, 020, 016 83½	780, 000 00	1, 800, 016 83½

During the year \$4,000 Indiana State bonds were paid in full, and \$2,000 included in the above table have been paid since the close of the fiscal year and the bonds surrendered to said State.

Soon after assuming my duties as Treasurer, the condition of the Indian trust fund was taken up, and the following letter was addressed to the Secretary of the Treasury:

TREASURY OF THE UNITED STATES,
Washington, May 7, 1885. .

SIR: My attention having been called to certain bonds and stocks of the Indian trust fund, held in custody in this office, on which principal and interest are due and unpaid, I have the honor to submit at once the accompanying statement of such bonds.

Under the act of June 10, 1876, Revised Statutes, volume 19, page 58, transferring the Indian trust fund from the Department of the Interior to the custody of this office, it is made the duty of the Treasurer of the United States to make all purchases and sales of bonds and stocks authorized by treaty stipulations or by acts of Congress, when requested so to do by the Secretary of the Interior, and to collect all interest falling due upon the bonds and stocks so held.

The principal and interest of a large number of these bonds have become due and remain unpaid, some of them for many years.

While it is made the duty of the Treasurer, under the act, to make all purchases and sales of bonds and stocks when requested so to do by the Secretary of the Interior, and to collect all interest falling due without such request, there may be a question as to the responsibility or duty of the Treasurer in reference to such past-due bonds and the interest thereon. I desire, therefore, for my guidance and information (if any action is to be taken by this office), to know—

(1) What steps are necessary to collect the principal of overdue State bonds, or to prevent statutes of limitation in the respective States from barring any action that may hereafter become necessary.

(2) What steps are necessary to collect past-due interest on such bonds, or on bonds not yet matured.

(3) What proceedings should be taken where the bonds are liens upon railroads and other corporations, as in the case of some of the bonds of the State of North Carolina.

Formal demand has been made for the payment of certain North Carolina bonds and refused, and correspondence has been had with the authorities of States in reference to the payment of past-due bonds with similar results.

Under section 3481, Rev. Stats. U. S., moneys due certain States have been stopped by this Department and the amount applied to the payment of interest due. The items are set forth in the accompanying list.

The statutes of the different States authorizing these bonds are not accessible to this office, and therefore the conditions under which the bonds were issued and the full nature of the liens are not known here.

Several of the State authorities have made propositions, authorized by their respective legislatures, for the exchange of bonds at certain rates for those of a new issue, which propositions could not be entertained without the authority of Congressional action.

If it shall be held that further demands be made for the payment of overdue principal, or that demands be made or suits instituted for the payment of overdue interest, I respectfully ask for instructions.

Very truly,

C. N. JORDAN,
Treasurer United States.

Hon. DANIEL MANNING,
Secretary of the Treasury.

(Statement of bonds and stocks inclosed with letter.)

This letter and statement were referred by the Secretary of the Treasury to the Solicitor, Hon. A. McCue, who made reply, as follows:

TREASURY DEPARTMENT, OFFICE OF THE SECRETARY,
Washington, D. C., May 26, 1885.

SIR: I have received your letter, "J. C. B.," of the 7th instant, asking for information respecting your duties as custodian of certain bonds and stocks of the Indian trust fund, under the act of June 10, 1876.

In reply I inclose herewith copy of communication dated 22d instant, from the Solicitor of the Treasury, to whom your letter had been referred, stating his views on the subject of your inquiry.

Very respectfully,

C. S. FAIRCHILD,
Acting Secretary.

To the TREASURER OF THE UNITED STATES.

DEPARTMENT OF JUSTICE,
OFFICE OF SOLICITOR OF THE TREASURY,
Washington, D. C., May 22, 1885.

SIR: By the act of June 10, 1876, the securities held by the Secretary of the Interior in trust for the benefit of Indian tribes were transferred to the custody of the United States Treasurer.

It was made the duty of this officer to collect the interest falling due thereon and deposit the same, and issue certificates of deposit therefor in favor of the Secretary of the Interior as such trustee, and to make purchases and sales of the securities authorized by treaty or acts of Congress when requested by the Secretary of the Interior.

From a statement made by the Treasurer it appears that the principal and interest of a large number of these securities have become due, and have remained unpaid, some of them for years.

He asks, in view of this fact, what steps are necessary for him to take to collect the principal and interest of overdue State bonds, and what proceedings should be taken where the securities are liens on railroads or other corporations.

The statute to which I have referred places a certain responsibility on the Treasurer. He is to be the custodian of the bonds. He is to collect the interest as it falls due, and he is to make purchases and sales of bonds when requested so to do by the Secretary of the Interior. His duties, it seems to me, as defined by the act, are ministerial simply.

If the principal of the stock or bonds or the interest on the same falls due and is not paid on demand made by the Treasurer of the United States, that fact should be communicated by him to the trustee, the Secretary of the Interior.

Whether or not such suit should be brought or other proceedings taken to compel payment from the defaulting maker of the bonds or other securities rests with the Secretary of the Interior, the trustee.

Very respectfully,

A. McCUE,
Solicitor of the Treasury.

Hon. DANIEL MANNING,
Secretary of the Treasury.

This correspondence was then referred to the Secretary of the Interior, with the accompanying letter, the reply to which is herewith given:

TREASURY OF THE UNITED STATES,
Washington, May 28, 1885.

SIR: I have the honor to transmit herewith a copy of an opinion of the Hon. A. McCue, Solicitor of the Treasury, delivered to the Hon. Secretary of the Treasury, in reference to certain unpaid stocks and bonds of the Indian trust fund, in response to a request made by myself on the 7th instant, a copy of which is also inclosed.

If, in pursuance of this opinion, it is necessary to take any action in reference to the unpaid principal and interest of said bonds, I respectfully ask for instructions in relation thereto.

Very respectfully,

C. N. JORDAN,
Treasurer U. S.

Hon. L. Q. C. LAMAR,
Secretary of the Interior.

DEPARTMENT OF THE INTERIOR,
Washington, August 7, 1885.

SIR: I have the honor to acknowledge the receipt of your letter of the 28th of May last, inclosing, for the information of the Secretary of the Interior, as trustee for certain Indian trust funds, a copy of an opinion of the Solicitor of the Treasury regarding the duties of the Treasurer of the United States in the matter of certain unpaid State stocks and bonds belonging to the Indian trust fund.

The State bonds now belonging to the Indian trust fund which have matured and remain unpaid are as follows:

State.	Amount.	Date of maturity.
Florida	\$132,000 00	Jan. 1, 1877.
North Carolina	10,000 00	Jan. 1, 1884.
Do	7,000 00	Jan. 1, 1885.
Do	121,000 00	Apr. 1, 1885.
South Carolina	125,000 00	Jan. 1, 1881.
Virginia	1,000 00	Nov. 13, 1882.
Tennessee	125,000 00	Jan. 1, 1883.
Do	65,000 00	Jan. 25, 1861.
Do	1,666 66½	Jan. 25, 1861.
Do	19,000 00	Jan. 1, 1870.

The interest on these bonds is also due and unpaid by the States for different and various periods.

The Indian trust funds were invested in these bonds by the Secretary of the Interior prior to 1861. The laws governing the matter at the time of purchase will be found in the act of January 9, 1837 (sec. 2096, R. S.), and act of September 11, 1841, (sec. 3659, R. S.).

By the act of June 10, 1876 (19 Statutes, 58), the stocks, bonds, securities, &c., of the Indian trust fund were transferred to the Treasurer of the United States as custodian, and it was thereafter made his duty to collect the interest thereon as it became due, &c.

The Solicitor holds in the opinion referred to that the Treasurer's duties as defined by this last-named act are "ministerial simply."

"If the principal of the stock or bonds or the interest on the same falls due and is not paid on demand made by the Treasurer of the United States, that fact should be communicated by him to the trustee, the Secretary of the Interior. The duty of the Treasurer in this regard ends here. Whether or not suit should be brought or other proceedings taken to compel payment from the defaulting maker of the bonds or other securities rests with the Secretary of the Interior, the trustee."

In view of this opinion, you request instructions in relation to the unpaid principal and interest of said bonds, if it is necessary to take any action in relation thereto.

This matter has heretofore been considered by Congress. By the act of March 3, 1865 (13 Statutes, 539), appropriations were made for the Indians for whom the non-paying bonds were held, in sums equal to the interest then due and unpaid. Since that date annual appropriations have been made to meet the unpaid interest, not only on the bonds not yet matured, but also on those which have matured.

The act of March 2, 1867 (14 Statutes, 497), required:

"That the Attorney-General of the United States shall be and is hereby instructed to inquire into the condition of all funds held in trust by the United States for said tribe (Chickasaw) and for all other tribes of Indians, and what proceedings should be taken for the security of the United States in respect to the same, and report thereon to Congress on the first Monday in December next."

The report of the honorable Attorney-General made in compliance with this law is found in House Ex. Doc. No. 59, Fortieth Congress, second session. The concluding portion of the report is as follows:

"So far as the States are liable upon these, either as principal obligors under the bonds issued by them respectively, or as guarantors of bonds issued by private or municipal corporations, I see no ground upon which that liability can be enforced either at law or in equity. A State can be sued only by its own consent. I am not advised that either of these States has, by its own consent, submitted itself to suit in any court. Nor is there a case made here for original suits against either of these States in the Supreme Court of the United States under the Constitution of the United States; for whether we regard these bonds as belonging to the United States or to the respective Indian tribes, the right to bring an original suit upon them against a State in the Supreme Court of the United States does not exist either in favor of the United States or any of these Indian tribes; for neither the United States nor an Indian tribe is a foreign state within the meaning of the constitutional provision, and as such entitled to bring an original suit against a State in the Supreme Court of the United States. But if any of these States holds claims against the United States, it may be deemed expedient to exercise the right of retention and application in the nature of a set-off, following the precedent set by the joint resolution of March 3, 1845 (5 Statutes at Large, page 801).

"This resolution is as follows:

"That whenever any State shall have been or may be in default for the payment of interest or principal on investments in its stocks or bonds, held by the United States as trust, it shall be the duty of the Secretary of the Treasury to retain the whole, or such thereof as may be necessary, of the percentage to which such State may be entitled of the proceeds of the sales of the public lands within its limits, and apply the same to the payment of said interest or principal, or to the reimbursement of any sum of money expended by the United States for that purpose."

"As to the remedy upon the bonds issued by private or municipal corporations by suit at law to recover the amount due for principal or interest, or by proceedings in chancery, where the bonds are secured by mortgage, or in mandamus to compel the levying of a tax by municipal corporations, in order to provide payment, the remedy would be the same in favor of the United States as in favor of any individual upon the bonds."

"It is at a loss to suggest any specific measure for further security in respect to said bonds. But it may happen that the indebted States and corporations may make propositions for compromise favorable to the bondholders, and Congress may be desired to give the Secretary of the Interior authority to entertain, and, in a proper discretion, to agree to such propositions."

Sums of money found by the Treasury due the States in default of payment of interest on bonds, have been from time to time covered into the Treasury to reimburse the United States for moneys appropriated by reason of such default.

The authorities of the State of North Carolina submitted in 1883 a proposition for the substitution of the old bonds of that State for those of a new issue, authorized by act of the State legislature. It was considered by my predecessor on December 11, 1883, who, under the circumstances of the case, declined to accede to the proposition, stating among other reasons that he doubted whether it would be proper for the Secretary of the Interior to make the exchange without the grant of special legislation therefor by Congress. Bills were pending in the Forty-eighth Congress which contemplated the granting of the necessary authority, but no law was enacted on the subject.

The facts regarding these State bonds which have matured, as well as those upon which instalments of interest are past due, are essentially the same or similar to those which obtained at the time of the report made by the honorable Attorney-General, whose opinion and conclusion on the subject are quoted above.

In view of the opinion of the Attorney-General, and of the further facts herein set out, the Secretary of the Interior does not consider it necessary or proper that any further means should be attempted with reference to the collection of the unpaid principal and interest of the bonds under consideration until appropriate legislation therefor shall have been enacted by Congress.

Very respectfully,

L. Q. C. LAMAR,
Secretary and Trustee.

Hon. C. N. JORDAN,
Treasurer United States.

It will, therefore, be seen that special attention has been given to the matter in question, and that further action must depend upon appropriate legislation by Congress, as stated by the Secretary of the Interior, trustee, in his letter given above.

The conclusion to be deduced from this correspondence applies with equal force to State bonds held in this office for the Secretary of the Treasury for account of the United States, a list of which is given in this report, and on which principal and interest are in default.

MISCELLANEOUS TRUSTS.

The following amounts are held for the different trusts stated:

American Printing House for the Blind, 4 per cents	\$250,000
Pennsylvania Company, 4½ per cents	200,000
Manhattan Savings Institution, 4 per cents	75,000
Alaska Commercial Company, 4 per cents	55,000

The first-named bonds are in the name of the Secretary of the Treasury, trustee, interest to the Treasurer of the United States for credit of appropriation to promote the education of the blind, act of March 3, 1879. The Pennsylvania Company bonds are held in pursuance of a circular of the Treasury Department in reference to bonds to be given by transportation companies as security for merchandise while in transit. The 4 per cent. bonds of the Manhattan Savings Institution are held as indemnity for certain stolen bonds, and those for the Alaska Commercial Company are held as security in the contract between said company and the Government.

The following described bonds are held for the Secretary of the Treasury:

Arkansas State bonds	\$625,000
Chesapeake and Ohio Canal bonds	12,000
Louisiana State bonds	545,480
Nashville and Chattanooga Railroad bonds	500,000
North Carolina State bonds	13,000
Tennessee State bonds	21,000
Virginia State bonds	41,800

These bonds are owned by the United States. Of the Arkansas bonds \$538,000 were formerly in the Smithsonian Institution fund; the remainder, \$87,000, was transferred from the Indian trust fund, amounts equal to principal and interest having been paid by appropriations for account of the Indian tribes for which the bonds were held. The bonds of North Carolina, Tennessee, and Virginia were also transferred from the Indian trust fund in the same manner. The bonds of the Nashville and Chattanooga Railroad Company became the property of the United States under an act of Congress providing for the collection of debts due from Southern railroad corporations, approved March 3, 1871 (16 Statutes, 473). All the bonds are non-interest paying, excepting the bonds of the Nashville and Chattanooga Railroad Company, the interest on which is paid as it accrues.

The bonds held by this office should receive the serious attention of the legislative power, the greater part of these bonds having been lying in the vaults of the Treasury, paying no interest save such as may have been sequestered from sums due the respective defaulting States, notwithstanding the fact that these States have in great part compromised with their creditors, and are now paying interest on a portion or the whole of their debt. These securities have cost the United States par, and there would seem to be no good reason why proper efforts should not be made to obtain payment in full or effect some compromise with the insolvent States. By a former ruling of this Department it has been held that money due the respective defaulting States could not be seized except for the current interest, and that no attention should be paid to the fact that by reason of default the principal had become due. The Treasurer has advised, under date of October 8, 1886, each of the secretaries and accounting officers who may be called upon to settle the accounts of these States, that all sums due the respective States should be held by them in order that such sums shall be applied to the payment of the principal or interest, or both, when any indebtedness from the Government to these States may arise. The correspondence in regard to this matter is herewith submitted.

TREASURY OF THE UNITED STATES,
Washington, October 8, 1886.

SIR: Referring to section 3481, Revised Statutes of the United States, providing for the retention of moneys due from the United States to any State that may be in default in the payment of principal or interest on stocks or bonds issued by said State and held in trust by the United States, I have the honor to call your attention to the following States whose bonds are held in this office in trust, on which principal and interest are due and unpaid; and to request that payment of moneys due any of said States be withheld and this office advised of such action: Arkansas, Florida, Louisiana, North Carolina, South Carolina, Tennessee, Virginia.

Very respectfully,

C. N. JORDAN,
Treasurer United States.

To the FIRST COMPTROLLER.

In connection with the bonds of the various States mentioned in the foregoing as held by the Treasury in trust, attention is called to the present status of the debts of the States named. The following memorandum, made up from the best attainable sources of information, will afford some idea of the sums that may be recovered by proper action of Congress on the subject of defaulted State bonds:

MEMORANDUM ON THE DEBTS OF THE STATES OF VIRGINIA, NORTH CAROLINA, SOUTH CAROLINA, FLORIDA, LOUISIANA, ARKANSAS, AND TENNESSEE.

VIRGINIA.—The entire debt of the State was created before the war. In 1871, after setting aside one-third of the debt and accumulated interest (amounting to over \$45,000,000) as West Virginia's share, the acknowledged debt was funded into 6 per cent. bonds due in 1905, with tax-receivable coupons. That which was not presented was nevertheless treated as funded. In 1879 another funding scheme was passed offering \$3,000 in a new 10-40 bond bearing interest for ten years at 3 per cent., ten years at 4 per cent., and twenty years at 5 per cent., for \$2,000 of bonds with tax-receivable coupons, and \$1,000 of non-tax-receivable coupon bonds. About \$8,500,000 were funded. These schemes have, however, been wholly or partially superseded by a new one to fund into a 3 per cent. bond on a basis for the 10-40s of 60 per cent., and for the 6 per cent. consols at 53 per cent. It is impossible to predict with any degree of probability what action will be taken. West Virginia has taken no action as to the one-third which Virginia set aside as her share of the debt.

Quotations.—Consols, 56; 10-40s, 43; 3s, 65; West Virginia share, interest from 1871, 12½.

NORTH CAROLINA.—This State funded its debt into 4 per cent. bonds, due in 1910, excepting an issue of \$2,795,000 North Carolina railroad-aid bonds maturing in the 80's, held by United States court to be a lien on the stock of the railway held by the State. It appears that these have also been "extended" to 1919, carrying the lien. The State, in this arrangement, compelled a surrender of \$240 interest per \$1,000 (overdue coupons). Six hundred and forty-nine thousand dollars were still unfunded about January 1, 1886. The bonds funded into 4s were scaled 60, 75, 85 per cent.

Quotations.—4s, par; new 6s, railroad, funded as stated above, 124.

SOUTH CAROLINA.—The State funded all the recognized debt, under the act of the legislature of 1873, into 6 per cent. bonds due 1893. Certain portions of the debt, issued in 1868, have been declared invalid. The old *ante-bellum* debt was scaled 50 per cent. in funding. About \$154,000 of the old State capitol bonds remain unfunded; also \$55,000 Blue Ridge Railroad aid bonds. These are only recognized so far as that they are *fundable*. A portion of the 6s above mentioned having been declared invalid, a new exchange was made in 1879, new bonds being issued *pro rata*, as the old 73s were recognized as valid. The latter are termed "brown consols."

Quotations.—Browns, 109; non-fundables, 4.

FLORIDA.—The recognized bonds of the State amount to \$350,000 7s of 1901, and \$925,000 6s of 1903. The State holds the greater part of these in its sinking and school funds, buying them in the market. A \$4,000,000 railroad 8 per cent. loan is claimed to be fraudulent and is not recognized. It is stated that the bonds held by the United States against the State are recognized, but that the State claims a set-off against the United States for expenses incurred in Indian wars.

Quotations.—6s of 1903, 113; 7s of 1901, 124.

LOUISIANA.—The State funded all its old debt into 7 per cents. at 60 cents on the dollar for principal and interest up to 1874; defaulted in 1880, and then by popular votes reduced interest to 2 per cent. for five years and 4 per cent. from 1885 to 1914.

Quotations.—78¾ to 79.

ARKANSAS.—About two-thirds of the State debt issued for railroads, levees, &c., has been repudiated by popular votes, &c. The old debt issued under acts of 1838 at 40 in aid of banks is "acknowledged," but no interest is paid thereon. A portion of these bonds (\$500,000) was, with the accrued interest, funded in 1870 into 30-year 6s. The greater portion is still unfunded, amounting with interest to about \$2,500,000.

It is stated that the debt question will be taken up by the legislature which will meet the coming winter. The State is in default for interest to a larger amount than the principal of the recognized debt.

Quotations.—Recognized debt, coupons from 1873, 110.

TENNESSEE.—The State funds the 6 per cent. railroad bonds into new 3 per cents. at 50 cents on the dollar for principal and accrued interest. (This law of the State superseded one which provided for a 3 per cent. bond for 60 per cent. of old principal and interest—bonds to run until 1912, at interest 3 per cent. for two years, 4 per cent. for two years, 5 per cent. for two years, and 6 per cent. from 1888 to 1912.) The old "State debt" is excluded from this operation; but it appears that this debt, amounting to \$2,118,000, is fundable into some sort of bond—ex-war interest (for four years). Certain bonds held by the State university were also excluded from the funding operations. There is a *contingent liability* apparently recognized for \$1,137,000 bonds of the East Tennessee, &c., and the Nashville and Chattanooga Railroads, indorsed by the State.

Quotations.—3s, 76½; 5s, 102; 6s, 106.

UNITED STATES BONDS HELD FOR NATIONAL BANKS.

At the close of the fiscal year the United States bonds held for account of the national banks, as security for circulation, amounted to \$275,974,800, a reduction of \$36,170,400 during the year. The amount held as security for public moneys was \$19,659,900, an increase of \$2,052,900. Three per cent. bonds held for circulation to the net amount of \$34,458,750 were withdrawn, most of which were surrendered for redemption.

Classes of bonds.	Per cent.	To secure circulation.	To secure public moneys.	Total.
Bonds issued to Pacific railroads.....	6	\$3,565,000	\$120,000	\$3,685,000
Funded loan of 1891	4½	50,484,200	2,787,000	53,271,200
Funded loan of 1907	4	114,143,500	8,571,000	122,714,500
Funded loan of July 12, 1892.....	3	107,782,100	8,181,900	115,964,000
Total .....	.....	275,974,800	19,659,900	295,634,700

The amount of bonds deposited during the year was \$26,924,900, and the bonds withdrawn amounted to \$61,042,400, showing a decrease of \$34,117,500.

SEMI-ANNUAL DUTY.

The payments by national banks during the fiscal year for semi-annual duty assessed upon them on account of circulation amounted to \$2,592,021.33. This amount is \$202,562.68 less than the duty collected for the year ending June 30, 1885, which decrease is due to the withdrawal of national-bank circulation, caused principally by the calling in for redemption of 3 per cent. United States bonds, a very large

proportion of which were held by the Treasurer in trust to secure circulating notes issued to national banks.

The deposits during the past year on account of reducing and liquidating banks and banks whose charters have expired amounted to the sum of \$50,391,891.75, and the retirement from circulation and cancellation of national-bank notes amounted to \$28,948,881, leaving outstanding on these accounts \$21,443,010.75 and a corresponding liability on the books of the Treasury.

Since the organization of the national banking system the total amount of semi-annual duty paid by the banks and collected by this office is, as shown in the appendix :

On circulation	\$63,796,798 55
On deposits	60,940,067 16
On capital	7,855,887 74
Total	<u>132,592,753 45</u>

THE REDEMPTION OF NATIONAL-BANK NOTES.

The national-bank notes presented for redemption during the fiscal year amounted to \$130,296,606, which was \$19,912,523, or 13.26 per cent. less than the amount presented for redemption in the fiscal year 1885. That there would be a falling off in the amount presented for redemption was indicated by the amount presented during the first three months of the fiscal year; and my opinion, based thereon, and expressed in my last report, that the culminating point in the second upward movement in bank-note redemptions had been reached in the fiscal year 1885, has been verified.

The rate of increase in the redemptions of bank notes during the second upward movement, covering the fiscal years 1882, 1883, 1884, and 1885, is represented by the percentages 27, 34, 22, and 19, respectively. A feature of this upward movement was the constantly decreasing volume of national-bank notes actually outstanding from \$362,421,988 on January 1, 1882, to \$319,069,932 on June 30, 1885, a decrease of \$43,352,056. This seems to indicate that the volume of bank notes outstanding during that period was excessive, or above the point at which it could be profitably maintained. Another fact, however, should be considered in this connection, which is that during these four years of increase in redemptions the silver-certificate circulation of the country was increased \$75,755,182, from \$39,110,729 on June 30, 1881, to \$114,865,911 on December 31, 1884. This increase much more than balanced the decrease in bank-note circulation, and the apparent excessive issue of bank notes might to a considerable extent be due to that fact. The decline in the volume of bank-note circulation has continued without interruption, until the amount outstanding on September 30, 1886, as reported by the Comptroller of the Currency, was \$303,511,241, making a total reduction of \$58,910,747 since January 1, 1882; and also after December 31, 1884, the silver-certificate circulation gradually decreased, until on July 31, 1886, it had fallen \$27,301,867 to \$87,564,044. The average outstanding for a year preceding that date was about \$91,000,000. Since July 1, 1885, the decline in the bank-note circulation has apparently had the effect to check the increase in bank-note redemptions, as they have steadily fallen off from that date, until they now are for the current fiscal year about 31 per cent. less than in the preceding year.

In counting the remittances of bank notes received for redemption during the year there was found \$25,528 in "overs," being amounts in

excess of the amounts claimed, and \$8,246 in "shorts," being amounts less than the amounts claimed—an increase in both items as compared with the preceding year, when they were \$17,060 and \$6,445, respectively. The counterfeit notes rejected and returned represented the nominal value of \$2,720, which was \$840 less than the amount rejected during the preceding year. The total amount of counterfeit notes which have been found in remittances of national-bank notes since the establishment of the redemption agency at the Treasury in 1874, is \$48,519. The "stolen" national-bank notes, that is, notes fraudulently put in circulation without the signatures of the bank officers, found in remittances during the year and rejected, amounted to \$420.

As usual, the months of September and January during the fiscal year have respectively furnished the smallest and largest amount of national-bank notes for redemption, the former month \$7,589,000, and the latter month \$17,485,000—a difference of nearly \$10,000,000.

From the principal cities the receipts were as follows: From New York, \$49,487,000, or 37.98 per cent., exceeding as usual the amount received from any other place during the year; from Boston, \$30,031,000, or 23.05 per cent.; from Philadelphia, \$7,323,000, or 5.62 per cent., and from all other places, \$43,455,600, or 33.35 per cent. The average percentage of receipts for the eleven fiscal years ending June 30, 1885, from the cities named and all other places was: For New York, 39.02 per cent.; for Boston, 24.53 per cent.; for Philadelphia, 6.07 per cent., and for all other places, 30.38 per cent., showing, by comparison, that in the last year there has been a slight decrease in the percentage of bank notes received from the principal cities, and a corresponding increase in the percentage received from all other places.

The total payments for national-bank notes redeemed during the year were \$130,029,625.12, and were made as follows: By the Treasurer's transfer checks drawn on the assistant treasurers of the United States and transmitted by mail, \$74,149,555.26, or 57.02 per cent.; by United States notes forwarded by express at the expense of the consignees, \$9,204,752.76, or 7.08 per cent.; by fractional silver coin and standard silver dollars forwarded by express and mail at the expense of the Government, \$555,037.84, or .43 per cent.; by redemptions at the counter, \$8,385,485, or 6.45 per cent.; by credits in general account as transfers of funds from subtreasuries and designated depositories, \$31,007,087.30, or 23.85 per cent.; and by credits in redemption accounts, \$6,727,706.96, or 5.17 per cent. It is worthy of remark that 72.92 per cent. of these payments were made without cost to the senders of the bank notes, and that only 7.08 per cent. of the payments were made at the expense of the consignees for express charges. The payments made in the preceding year at the expense of the consignees were 12.83 per cent. Year by year the payments in redemption of bank notes effected by the use of checks and credits have increased until practically the total redemptions are now so made.

The deposits made by national banks during the year to maintain the 5 per cent. redemption fund amounted to \$103,359,393.61. Of this sum, \$2,363,184.15, or 89.36 per cent., was deposited for the Treasurer in the subtreasury offices, and afforded more than the amount necessary to pay the transfer checks drawn by him against these offices in the redemption of national-bank notes. The balance of the deposits, amounting to \$10,996,209.46, was received directly by the Treasurer—\$1,787,241.84, or 1.73 per cent. of the total deposits, over the counter; \$3,433,468.78, or 3.32 per cent., in lawful money forwarded to him by express at the

consignors' expense; and \$5,775,498.84, or 5.59 per cent., in proceeds of national-bank notes redeemed.

There was assorted and delivered on the 5 per cent. account during the fiscal year \$101,234,035 in redeemed notes. Of this sum \$46,701,100, or 46.13 per cent., was forwarded to the banks of issue in notes fit for circulation, and \$54,532,935, or 53.87 per cent., in notes unfit for circulation was delivered to the Comptroller of the Currency, to be destroyed and replaced with new notes. The total amount delivered on the 5 per cent. account was \$17,070,465, or 14.43 per cent. less than the amount delivered in the preceding year. This decrease is the result of a falling off of \$18,136,765 in the amount of unfit notes delivered, and an increase of \$1,066,300 in the amount of fit notes forwarded to banks.

The deposits made by national banks "failed," "in liquidation," and "reducing circulation" during the year, under the various provisions of law, for the retirement of their circulation, amounted to \$51,209,961.75, being nearly double the amount so deposited in the preceding year. This large increase was in great measure due to the calling in for payment by the Government of its 3 per cent. bonds, which were largely owned by the banks and pledged with the Government as security for their circulating notes. Included in the above amount is \$32,423,156.75 deposited by banks under the provisions of section 6 of the act of July 12, 1882, which requires that "at the end of three years from the date of the extension of the corporate existence of each bank the association so extended shall deposit lawful money with the Treasurer of the United States sufficient to redeem the remainder of the circulation which was outstanding at the date of its extension."

The amount of notes redeemed, assorted, and delivered during the year on account of these classes of banks was \$29,557,588. The balance on account of these deposits ran up during the year in the sum of \$21,652,373.75, which, added to the balance of June 30, 1885, made the balance at the close of the year, June 30, 1886, \$60,248,705.85, the largest sum at any time before held in the Treasury for the redemption of the circulation surrendered by the national banks. The total deposits made on these accounts since the establishment of the national banking system to the close of the year were \$295,225,393, and the total redemptions of notes out of these deposits were \$234,976,687.15. During the first five months of the current fiscal year, these deposits have been \$37,926,885.25. The redemptions for the same period have been \$11,064,273.50 making an increase of \$26,862,611.75 in the balance on deposit, which on November 30, 1886, was \$87,111,317.60.

The assorting and delivering of redeemed national-bank notes at shorter intervals than formerly, which was adverted to in my last report, was continued throughout the year. The number of packages prepared and delivered was 106,236, being 44,967 more than in the preceding year. Of these, 29,690 inclosed notes fit for circulation to the respective banks of issue, and 76,546 inclosed notes to the Comptroller of the Currency for destruction.

The expenses incurred in the redemption of national-bank notes during the year, and paid out of the 5 per cent. fund, were \$168,243.35, and were less by \$13,613.81 than the expenses incurred in the preceding year. They were made up as follows: For charges for transportation, \$74,490.52; for salaries, \$89,065.18—\$75,322.19 in the Treasurer's office and \$13,742.99 in the Comptroller's office; for printing and binding, \$3,190.89; for stationery, \$1,163.65; and for contingent expenses, \$333.11. The charges for transportation cover the cost of transporting the national-bank notes to Washington and the return of the assorted

notes fit for circulation to the respective banks of issue. This item of expense fluctuates according to the amount of notes presented for redemption, and by reason of diminished redemptions during the year was \$10,764.96 less than in the preceding year. In the expenditure for salaries there was a saving of \$4,306.64, as compared with the preceding year, and a saving of \$9,314.82 of the amount appropriated for that purpose. These expenses will be assessed in the usual manner, in compliance with law, against the national banks whose notes have been redeemed. The amount of notes redeemed during the year which under the law are subject to assessment is \$128,518,763.50, making the rate of expense $\$1.30\frac{21}{100}$ per \$1,000.

During the year assessments for expenses of retiring the circulation of national banks in liquidation, made under the provisions of section 8 of the act of July 12, 1882, amounted to \$3,292.20. A charge was made to that fund on November 16, 1885, of \$9,627.21, for its share of the expenses of the fiscal year 1885 incurred in redeeming the notes of liquidating banks subject to the provisions of section 8 of the act of 1882, to the amount of \$7,658,877, at $\$1.25\frac{7}{10}$ per \$1,000, the rate of expense for that year. The balance to the credit of that fund on June 30, 1885, was \$33,681.29, and on June 30, 1886, it was \$27,346.28.

Tables in the Appendix, numbered 27 to 37, give in detail the transactions during the year in the redemption of national-bank notes.

RETIREMENT OF NATIONAL BANK CIRCULATION.

As there seems to be on the part of the public an idea that the Treasury is locking up money in its vaults on account of this fund, the whole operation of the retirement of the notes of a national bank will be stated here in order to relieve any apprehension which may be felt on this subject. The 3 per cent. bonds of the Washington National Bank of Westerly, R. I., amounting to \$100,000, were called on the 15th day of September, 1886. On the 12th day of October, 1886, the bank sent its duplicate receipt to this office, the original being held by the Comptroller of the Currency, with the request that a deposit of 90 per cent. of the above amount should be made to retire its circulation with the Treasurer of the United States, as agent for the redemption of the notes of the national banks, and requesting a check for the 10 per cent. difference. Accordingly a credit was placed upon the books of the Treasurer, as agent for the national banks, for \$90,000, and a check for \$10,000, and the amount standing to the credit of the bank in the 5 per cent. redemption fund—in this case \$4,500—returned to the bank. The amount of redeemed notes charged to this account since it was opened is \$1,892. The annual percentage of such redemptions is 25.22, and it will therefore take at least four years before the greater part of the notes of this bank will be redeemed. The amount credited to the general fund thus created stands on the books of the Treasurer, as agent, as a credit for the redemption of the notes of the banks, and as the notes come in for redemption they are charged to this account, and the national-bank circulation outstanding is decreased by a corresponding amount. At present, owing to the active business season, none but mutilated notes are sent in for redemption. Persons presenting these notes for redemption are paid either by check on New York or in such form of currency as may be desired by them. The indebtedness on the part of the Treasury, created as above described, is, no doubt, due in legal-tenders, but is liquidated in the manner stated, and no attempt is made to reserve any specific sum of legal-tenders, or any other form of

currency, out of the general Treasury balance in which to pay these constantly accruing liabilities. There was on November 30 of this kind of liability, adding the 5 per cent. fund, which, theoretically, is also composed of legal-tenders, the sum of \$94,752,389. The total amount of legal-tenders in the Treasury on the same date, exclusive of that held to redeem the legal-tender certificates which are used in the banks as reserve in their stead, was \$29,548,188, thus showing that there must be held in the Treasury in some other forms of money the balance of \$65,204,201. The entire sum of \$94,752,389 may be said to be composed of \$29,548,188 legal-tenders, \$32,602,100 standard silver dollars, and \$32,602,100 gold. If the books of the Treasury stated accurately the balances due by it as a depository, the amount now reported as a credit balance would be materially decreased. That these balances should not be so reported is, in the opinion of the Treasurer, one of the greatest defects of the present Treasury system.

THE WORK OF THE OFFICE.

The Treasurer again commends, with great pleasure, his subordinates in office for attention and accuracy in their responsible duties, and, while doing so, expresses the hope that at no distant day some method may be adopted which will duly reward their long and faithful service. A bill passed by Congress which would provide half pay for officials who have grown gray in the service of the Treasury, would be a measure alike of justice and good sense, as it would increase the efficiency of the office, and furnish an inducement to clerks skilled in their duties to remain in the service of the Government. The thanks of the Treasurer are due especially to Messrs. J. F. Meline, Thos. E. Rogers, D. W. Harrington, F. Weiler, Chas. L. Jones, F. W. Lantz, and J. O. Manson, of his office; Mr. E. B. Elliott, Government Actuary, and Mr. M. L. Muhleman, of the New York sub-treasury, for valuable services performed by these gentlemen, in addition to their regular duties.

Very respectfully, your obedient servant,

C. N. JORDAN,
Treasurer of the United States.

Hon. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF THE DIRECTOR OF THE MINT.

TREASURY DEPARTMENT, BUREAU OF THE MINT,
Washington, D. C., October 20, 1886.

HON. DANIEL MANNING,
Secretary of the Treasury :

SIR : The duties of Director of the Mint were entered upon by me at the beginning of the fiscal year ended June 30, 1886.

While the volume of the work executed during the same year by the several mints and assay offices of the United States was greater than that of the previous year, the total expenditure was less by \$197,089.71.

I proceed to exhibit in detail the performance of the mint service and its expenditures ; this being my second annual report, the first having been made for a period under the administration of my predecessor.

APPROPRIATIONS, EARNINGS AND EXPENDITURES.

The specific appropriations made by Congress for the support of the mints and assay offices of the United States during the fiscal year ended June 30, 1886, amounted to \$1,169,350.

Of this amount there was expended \$947,369.04, leaving unexpended in the Treasury of the United States of the specific appropriations the sum of \$221,980.96, as shown in the following statement :

UNEXPENDED BALANCES OF APPROPRIATIONS, MINTS AND ASSAY OFFICES
FISCAL YEAR 1886.

Institutions.	Salaries.	Wages.	Contingent expenses.
Mint at Philadelphia.....	\$2,767 11	\$2,163 71	\$31,118 84
Mint at San Francisco.....		60,345 41	14,913 30
Mint at Carson.....	19,204 88	50,914 50	23,009 41
Mint at New Orleans.....	87 68	3 75	2,103 39
Mint at Denver.....	514 30	3,264 25	2,742 72
Assay office at New York.....	421 20	2,090 50	3,382 53
Assay office at Helena	23 35	852 81	551 52
Assay office at Boisé.....			12 88
Assay office at Charlotte.....			874 40
Assay office at Saint Louis.....			1,118 57
Total	23,018 52	119,134 93	79,827 51

In addition to the amount expended from the annual appropriations made by Congress for the support of the mints and assay offices the sum of \$119,976 was expended by two of the coinage mints from the indefinite general appropriation contained in the act authorizing the coinage of the standard silver dollar, passed February 28, 1878.

This amount was expended solely for defraying expenses incidental to the coinage of the silver dollar, as provided in that act.

For the support of the mints and assay offices, including the cost of the mandatory coinage of the silver dollar, the total expenditures from the two classes of appropriations, specific and general, during the fiscal year ended June 30, 1886, were, as exhibited in the following statement, \$1,067,345.04.

APPROPRIATIONS AND EXPENDITURES FOR THE MINTS AND ASSAY OFFICES, 1886.

APPROPRIATIONS.

Institutions.	Salaries.	Wages.	Contingent.	Coinage of the standard silver dollar, act of February 28, 1876 (Indefinite).	Total.
COINAGE MINTS.					
Philadelphia.....	\$41,550 00	\$293,000 00	\$100,000 00	.....	\$434,550 00
San Francisco	41,900 00	235,000 00	50,000 00	.....	326,900 00
Carson.....	29,550 00	60,000 00	25,000 00	.....	114,550 00
New Orleans	31,950 00	74,000 00	35,000 00	.....	140,950 00
ASSAY OFFICES.					
Denver	10,950 00	14,000 00	6,000 00	.....	30,950 00
New York	39,250 00	25,000 00	10,000 00	.....	74,250 00
Helena	7,950 00	12,000 00	8,000 00	.....	27,950 00
Boisé	3,000 00	.....	5,000 00	.....	8,000 00
Charlotte	2,750 00	.....	2,000 00	.....	4,750 00
Saint Louis	3,500 00	.....	3,000 00	.....	6,500 00
Total	212,850 00	713,000 00	244,000 00	.....	1,169,850 00

EXPENDITURES.

COINAGE MINTS.					
Philadelphia.....	\$38,782 89	\$290,836 29	\$68,881 16	\$83,097 99	\$481,598 33
San Francisco.....	41,900 00	174,634 59	35,066 70	.....	251,641 29
Carson	10,345 12	9,085 50	1,990 50	.....	21,421 21
New Orleans.....	31,862 32	73,996 25	32,896 61	36,878 01	175,633 19
ASSAY OFFICES.					
Denver	10,435 70	10,735 75	3,257 28	.....	24,428 73
New York	38,828 80	22,909 50	6,617 47	.....	68,355 77
Helena	7,926 65	11,647 19	7,448 48	.....	27,022 32
Boisé	3,000 00	.....	4,967 17	.....	7,967 17
Charlotte	2,750 00	.....	1,125 60	.....	3,875 60
Saint Louis.....	3,500 00	.....	1,881 43	.....	5,381 43
Total	189,331 48	503,865 07	164,172 49	119,976 00	1,067,345 04

The total amount expended during the previous fiscal year was \$1,261,601.29. Thus there was a reduction of expenditures in the mint service during the past fiscal year amounting to \$194,256.25. A comparative statement of the coinage executed during the same years will presently be introduced. It was considerably greater during the last than the preceding year.

The reduction is exhibited in the following table:

COMPARISON OF EXPENDITURES ON ACCOUNT OF THE MINT SERVICE, FISCAL YEARS 1885 AND 1886.

Appropriations.	1885.	1886.
Salaries.....	\$210,712 27	\$189,331 48
Wages of workmen.....	681,125 36	503,865 07
Contingent expenses	212,821 44	164,172 49
Standard silver dollar	156,942 22	119,976 00
Total	1,261,601 29	1,067,345 04

In addition to the expenditures of the mints and assay offices, the expenses of the office of the Director of the Mint, including the salaries of officers and employes, expenditures for examinations of mints, for books and incidentals, and on account of Laboratory, were \$34,197.85 in 1886, against \$37,031.31 in 1885, a reduction of \$2,833.46.

This reduction of expenditures is exhibited in the following table:

COMPARISON OF EXPENSES OF THE BUREAU OF THE MINT FOR THE FISCAL YEARS 1885 AND 1886.

Appropriations.	1885.		1886.	
	Appropriated.	Expenditures.	Appropriated.	Expenditures.
Salaries of officers and clerks.....	\$28,780 00	\$28,346 32	\$28,440 00	\$28,000 00
Examinations of mints, &c	2,500 00	2,497 20	2,500 00	2,417 31
Collecting mining statistics.....	4,000 00	3,696 93	4,000 00	2,444 16
Laboratory	1,500 00	1,485 61	1,000 00	887 85
Books, pamphlets, &c	1,005 25	1,005 25	1,000 00	998 63
Total	87,785 25	87,031 31	86,940 00	84,197 85

In addition to the amount expended at the mints from the standard silver dollar appropriation, there was expended at the Department, for daily quotations from London by telegraph of the price of silver, the sum of \$918, which is the exact amount expended for the same purpose during the preceding fiscal year. Quotations so received are indispensable in making purchases of silver for the silver dollar coinage.

The total reduction of expenses effected in the administration of the mint service during the fiscal year ended June 30, 1886, from the expenditures of the prior year amounted, as already stated, to \$197,089.71.

The appropriations for the fiscal year 1886-'87 amount to \$1,092,100, against \$1,169,350 for the fiscal year 1885-'86, being a reduction of \$77,250.

The appropriations for the fiscal year 1886-'87, as distributed among the various institutions, are exhibited in the following table:

APPROPRIATIONS FOR THE SUPPORT OF THE MINTS AND ASSAY OFFICES FOR THE FISCAL YEAR 1887.

Institutions.	Salaries.	Wages of workmen.	Contingent expenses.	Total.
Mint at Philadelphia	\$41,550 00	\$293,000 00	\$100,000 00	\$134,550 00
Mint at San Francisco	41,900 00	170,000 00	40,000 00	251,900 00
Mint at Carson	29,550 00	60,000 00	25,000 00	114,550 00
Mint at New Orleans	31,950 00	74,000 00	35,000 00	140,950 00
Mint at Denver.....	10,950 00	14,000 00	6,000 00	30,950 00
Assay office at New York.....	30,250 00	25,000 00	10,000 00	74,250 00
Assay office at Helena.....	7,700 00	12,000 00	6,000 00	25,700 00
Assay office at Boisé City.....	3,000 00	.....	5,000 00	8,000 00
Assay office at Charlotte	2,750 00	.....	2,000 00	4,750 00
Assay office at Saint Louis	3,500 00	.....	3,000 00	6,500 00
Total	212,100 00	648,000 00	232,000 00	1,092,100 00

EARNINGS AND EXPENSES OF THE REFINERIES OF THE COINAGE MINTS AND THE ASSAY OFFICE AT NEW YORK.

Paragraph 8, chapter 327, of Vol. I, Supplement to the Revised Statutes United States, provides as follows:

And refining and parting of bullion shall be carried on at the mints of the United States and at the assay office at New York.

And it shall be lawful to apply the moneys arising from charges collected from depositors for these operations pursuant to law so far as may be necessary to the defraying in full of the expenses thereof, including labor, materials, and wastage; but no part of the moneys otherwise appropriated for the support of the mints and the assay office at New York shall be used to defray the expenses of refining and parting bullion.

Under this provision of law, which was passed originally in the appropriation act approved August 15, 1876, the charges for parting and refining bullion were so fixed at the several coinage mints and assay office at New York that collections should equal as nearly as possible the expenses of the operations. The charges have been reduced from time to time with the reduction of cost of acid and other materials consumed, and as rendered practicable by extension of the scale of operations. The charges collected from depositors have since the 1st of July, 1876, been deposited in the Treasury of the United States to the credit of a fund denominated "parting and refining appropriation." Monthly advances have been made from this appropriation to the officers in charge of the various institutions, by whom monthly accounts of expenses have been rendered.

During the last fiscal year the charges collected from depositors for parting and refining bullion amounted to \$162,855.53, while the total expenditures were \$167,571.97, so that the expenses exceeded the receipts by \$4,716.44.

This was occasioned by a ruling of the First Comptroller that the proceeds of the sale of blue vitriol and spent acid should be covered into the Treasury on account of sales of by-products as old material, these by-products having previously been taken at their market value by dealers in acid in part payment, and credited in their accounts.

The sum deposited on this account during the last three quarters of the fiscal year was \$17,178.81. Deducting this credit from the expenditures for last year leaves for net expenditures \$150,393.16. The net profit of parting and refining amounted accordingly to \$12,462.37.

The amount to the credit of the parting and refining fund in the Treasury of the United States at the close of the fiscal year 1885-'86, being the excess of the charges deposited to the credit of the fund over and above the amount drawn from the same for expenditures during the period of ten years commencing July 1, 1876, was \$184,436.57.

The charges collected and the expenditures at each institution during the fiscal year 1885-'86 are exhibited in the following table:

CHARGES COLLECTED FOR PARTING AND REFINING BULLION, AND EXPENDITURES, DURING FISCAL YEAR 1886.

Institutions.	Charges collected.	Gross expenditures.	Net expenditures.
Mint at Philadelphia	\$13,007 43	\$6,060 78	\$6,060 76
Mint at San Francisco	56,355 91	58,661 76	58,662 76
Mint at Carson	47 86	939 80	939 80
Mint at New Orleans	783 09	1,411 36	1,411 36
Assay office at New York	92,621 24	100,197 29	*83,318 48
Total	162,855 53	167,571 97	150,393 16

* Value of blue vitriol and spent acid sold during the year, previously credited on bills for acid, \$17,178.81.

EARNINGS AND EXPENDITURES.

In the Appendix will be found the annual statement for the fiscal year showing the earnings from all sources at the mints and assay offices, as well as the expenditures and losses of all kinds.

The total amount earned was \$6,032,680.39, of which \$5,763,851 consisted of seignorage on silver dollars coined during the year, and \$62.38 on subsidiary silver. The total expenses and losses of all kinds amounted to \$1,429,591.82.

DEPOSITS AND PURCHASES OF GOLD AND SILVER AT THE MINTS AND ASSAY OFFICES.

The total value of the gold deposited at the mints and assay offices during the fiscal year ended June 30, 1886, amounted to \$49,606,534.65, of which amount \$4,696,785.42 consisted of bars of the several institutions re-deposited, leaving the net value of the gold deposited \$44,909,749.23 against \$52,894,075.09 in the preceding fiscal year, a falling off of \$7,984,325.86. Of the deposits of gold at the mints and assay offices for the fiscal year 1885-'86 the sum of \$32,456,493.64 was classified as of domestic production, and \$4,317,008.27 as foreign bullion; \$393,545.28 consisted of United States gold coins remelted, and \$5,673,565.04 of foreign coins. The remainder, \$2,069,077, consisted of jewelers' bars, old plate and jewelry, and miscellaneous old material.

The total value of the silver, computed at its coining rate in standard silver dollars, which is the accounting rate at the mints, deposited, purchased and parted at the mints and assay offices of the United States during the last fiscal year amounted to \$37,917,026.36 (32,584,944.61 standard ounces). Of this amount the sum of \$2,422,843.12 (2,082,130.83 standard ounces) consisted of fine and unparted bars of the several institutions re-deposited, leaving the net value of the silver deposited, purchased and parted during the year \$35,494,183.24 (30,502,813.78 standard ounces) against \$36,789,774.92 (31,616,212.91 standard ounces) in the preceding fiscal year: being a falling off in the net deposits of silver of 1,113,399.13 standard ounces of the value of \$1,295,591.68. Of the net value of the silver deposited for bars, parted from gold and purchased for coinage during the year, namely, \$35,494,183.24, the sum of \$32,454,644.56 was classified as of domestic production, \$1,480,425.43 of foreign bullion, \$279,292.39 United States coins melted, \$812,664.50 of foreign coins, and the remainder, \$467,156.36, of old jewelry, plate, &c.

A very marked increase is to be noticed in the deposits of gold bullion at the Mint at San Francisco. The total value of the gold, exclusive of re-deposits, deposited at this institution during the fiscal year 1886 amounted to \$27,319,837.25, against \$20,774,252.86 in the preceding year, an increase of six and a half millions. This is the first year since 1882 that there has not been a decline in the deposits of gold at this institution, the marked decline since 1881 exhibited on page 4 of my annual report for the fiscal year 1884-'85, having amounted in the four years ended June 30, 1885, to \$8,072,438.07. This is now very nearly offset by the large increase during the last fiscal year.

The most marked falling off in gold deposits during the year was at the Assay Office at New York, where the value of the gold deposited, exclusive of re-deposits, amounted to only \$13,791,632.29, against \$26,419,503.11 in the preceding year, being a falling off of about one-half.

In the Appendix will be found a statement showing the value of the foreign gold coin, by denomination of pieces, deposited at the Assay

Office at New York in each of the eleven fiscal years 1875–1885 inclusive: also, statements showing the value of the foreign gold and silver coins deposited at the Mint at San Francisco in each fiscal year 1879–1886, with the countries of their coinage.

COINAGE.

The coinage of gold, performed exclusively at the mints at Philadelphia and San Francisco, amounted during the past fiscal year to 5,050,814 pieces, of the value of \$34,077,380, against 1,748,158 pieces, valued at \$24,861,123.50, in the preceding year. Of the gold coinage of the year, the sum of \$27,080,000 was executed at the Mint at San Francisco; the rest at Philadelphia.

Of the gold coinage \$4,871,680 was in double-eagles; \$10,428,470 in eagles; \$18,758,145 in half-eagles; \$303 in three-dollar pieces; \$10,215 in quarter-eagles, and \$8,567 in dollars.

The silver coinage during the year amounted to 31,627,157 pieces of the value of \$30,022,347.95, against 31,699,096 pieces, of the value of \$28,848,959.65, in the preceding fiscal year.

Of this amount \$29,838,905 consisted of silver dollars, \$3,052.50 of half-dollars, \$3,626.25 of quarter-dollars, and \$176,764.20 of dimes. The silver coinage was executed principally at the mints at Philadelphia and New Orleans. The Mint at Carson was closed during the entire year, although the coinage of 28,000 silver dollars is credited to that institution. This coinage was really executed prior to June 30, 1885, but not delivered by the coiner to the superintendent until after July 1, 1885, which brought it into this year's statement of coinage.

In addition to the gold and silver coinage, 1,706,651 minor coins were struck, of the value of \$17,377.65. 1,696,613 pieces, of the value of \$16,966.13, consisted of 1-cent bronze coins; 4,519 pieces, of the face value of \$135.57, of 3-cent nickel pieces, and 5,519 pieces, of the face value of \$275.95, of 5-cent nickel pieces. The minor coinage was executed at the Mint at Philadelphia.

The coinage executed was as follows:

COINAGE, FISCAL YEAR 1886.

Description.	Pieces.	Value.
Gold	5,050,814	\$34,077,380 00
Silver.....	31,627,157	30,022,347 95
Minor coins.....	1,706,651	17,377 65
Total	38,384,622	64,117,105 00

MANUFACTURE OF GOLD AND SILVER BARS.

In addition to the coinage executed by the mints, the value of the gold and silver bars manufactured during the fiscal year 1886 amounted to—

Gold.....	\$19,031,809 21
Silver	5,236,223 77
Total.....	27,268,032 98

The production of bars in the previous fiscal year amounted to—

Gold	\$32,027,463 02
Silver	9,549,313 37
Total.....	41,576,776 39

The production of gold and silver bars was less by \$14,308,743.41 than in the preceding year.

EXCHANGE OF GOLD BARS FOR GOLD COIN.

Under the provisions of the act of May 26, 1882, the mints of the United States and the Assay Office at New York were authorized to exchange gold bars for deposits of gold coin. The value of the bars so exchanged during the year amounted to \$31,598,748.81, of which over \$31,000,000 was exchanged at the Assay Office at New York.

The following table exhibits the value each month of the fiscal year of the fine gold bars given in exchange for gold coin at the Mint at Philadelphia and the Assay Office at New York. The total value of the bars thus exchanged (\$31,598,748.81) was largely in excess of the amount exchanged during the previous year, which was only \$2,065,021.78. The large increase was occasioned by the demand for gold bars for export.

STATEMENT BY MONTHS OF FINE GOLD BARS EXCHANGED FOR GOLD COIN AT THE MINT AT PHILADELPHIA AND ASSAY OFFICE AT NEW YORK, FROM JULY 1, 1885, TO JUNE 30, 1886.

Month.	Philadelphia.	New York.	Total.
1885.			
July	\$20,067 36	\$89,696 28	\$109,763 64
August	25,080 23	197,781 95	222,862 18
September	30,093 35	418,953 61	449,046 96
October	35,121 02	385,865 70	420,986 72
November	35,112 97	290,272 83	325,385 80
December	35,112 75	816,531 53	851,644 28
1886.			
January	35,109 45	1,507,943 16	1,543,052 61
February	35,123 47	4,276,211 11	4,311,334 58
March	50,172 42	7,931,940 23	7,982,112 65
April	25,083 50	3,529,354 83	3,554,438 33
May	45,143 24	5,773,223 86	5,818,367 10
June	35,123 51	5,974,628 45	6,009,751 96
Total	406,345 27	31,192,403 54	31,598,748 81

COINAGE AND MEDAL DIES MANUFACTURED.

The number of medals manufactured at the Mint at Philadelphia during the fiscal year ended June 30, 1886, was 765, of which 54 were gold, 404 silver, and 307 bronze.

The number of medals sold during the year was 876, value \$4,652.19; and of proof-sets 3,358, value \$4,515.92. A detailed statement of the same will be found in the Appendix.

The number of coinage and medal dies manufactured was 528, of which 183 consisted of gold coinage dies, 280 of silver; 28 of minor coinage, 26 of proof-coinage, and the others of medal dies.

The number of coinage dies manufactured for each of the coinage mints is exhibited in a table in the Appendix. Heretofore the cost of engraving these dies has been paid from the appropriation for the support of the Mint at Philadelphia, but under instructions as intimated in my previous report, has, since the commencement of the present fiscal year, been paid from the appropriation for the support of the mint to which the dies are furnished.

REFINING BY ACIDS.

The number of ounces of bullion sent to the acid refineries of the coinage mints and the Assay Office at New York to be refined during the year was 7,246,795, from which was separated gold and silver bullion as follows:

	Standard ounces.	Value.
Gold	1, 123, 193	\$20, 896, 613
Silver	5, 920, 573	6, 889, 393
Total .....	.....	27, 786, 006

This sum was against \$37,050,049 in the previous year. In the value of the bullion required to be refined at the mints and assay offices during the year, there was a falling off of \$9,264,043.

As pointed out in my special report on the Production of the Precious Metals for the calendar year 1885, it is apparent that a larger portion of the refined production of the mines of this country found its way to private refineries than heretofore. While most of the bullion, especially gold, was eventually deposited at the mints and assay offices of the United States, it was more in the nature of refined bullion than heretofore.

The following table exhibits the weight of the bullion sent to the refineries of each of the mints and of the Assay Office at New York during the year, and the weight and value of the precious metals extracted:

REFINING (BY ACIDS); FISCAL YEAR 1886.

Mint or assay office.	Gross ounces.	Gold, standard ounces.	Value.	Silver, standard ounces.	Value.	Total value.
Philadelphia.....	577, 066	135, 991	\$2, 530, 065	448, 337	\$521, 701	\$3, 051, 766
San Francisco	1, 766, 009	367, 004	6, 829, 097	1, 536, 619	1, 788, 066	8, 617, 163
New Orleans.....	56, 350	16, 646	309, 693	38, 953	45, 327	355, 020
New York.....	4, 846, 710	603, 492	11, 227, 758	3, 896, 664	4, 534, 299	15, 762, 057
Total	7, 246, 795	1, 123, 193	20, 896, 613	5, 920, 573	6, 889, 393	27, 786, 006

PURCHASE OF SILVER FOR THE COINAGE OF THE STANDARD SILVER DOLLAR.

The act passed February 28, 1878, provided—

That there shall be coined at the several mints of the United States silver dollars of the weight of 412½ grains Troy of standard silver. * * * And the Secretary of the Treasury is authorized and directed to purchase from time to time silver bullion, at the market price thereof, not less than \$2,000,000 worth per month, nor more than \$4,000,000 worth per month, and cause the same to be coined monthly, as fast as so purchased, into such dollars.

Prior to the commencement of the present fiscal year the Director of the Mint was charged not only with the supervision of the details of the purchases of silver bullion, but also with the reception of weekly bids by telegraph for the sales of silver bullion to the government, to be considered by himself and the other members of the Commission constituted March 9, 1878, by order of the Secretary of the Treasury, for the purpose of considering and recommending to the Secretary purchases of silver bullion.

On July 10, 1885, I had the honor to address you a communication in which I recommended that all bids be addressed to the Treasurer of the United States, and that the executive duties of the Commission be transferred from this Bureau to the Treasurer, except so far as these duties were in actual relation with the mints. It was also proposed that bids be invited on two days of each week, instead of one day as previously, with a view of preventing combinations in the silver market unfavorable to the government. Both of these recommendations were carried into effect by your order of July 14, 1885, since which date bids for the sale of silver bullion in lots of not less than 10,000 ounces have been addressed to the Treasurer of the United States on every Tuesday and Friday either by telegraph or by letter. The practical details of all transactions remain, as heretofore, in charge of this Bureau.

The amount of silver purchased and delivered during the fiscal year 1885-'86 in the manner stated was 24,296,413.76 standard ounces, costing \$22,547,582.60, being an average cost per standard ounce of \$0.928002, or \$1.031113 per ounce fine. The average London price during the same period, computed from daily cable despatches to the Bureau of the Mint, was 47.038 pence per ounce, British standard. This, at the average rate of sterling exchange, \$4.8751, was equivalent to \$1.03295 per ounce fine.

In addition to the purchases by the Secretary of the Treasury on the recommendation of the Commission, silver bullion was also purchased, under authority given the superintendents of the coinage mints to purchase lots offered of less than 10,000 ounces, at a price fixed from time to time by the Director of the Mint to conform as nearly as possible to the market price of silver. The amount of silver purchased in lots of less than 10,000 ounces by the officers in charge of the coinage mints during the fiscal year 1885-'86 was 239,174.56 standard ounces, at a cost of \$221,707.65.

The silver contained in gold deposits called "partings" is also purchased for use toward the specific requirements of law for the silver-dollar coinage, at a price fixed from time to time by the Director of the Mint. The amount of silver representing the charges on deposits of silver bullion for bars, as well as the minute fractions of the deposit over and above the value of the bar returned, is, by authority of the Secretary of the Treasury, also purchased for use in the silver-dollar coinage, at the rate of \$1 per standard ounce. The total amount of silver purchased during the year in partings and charges and bar-fractions was 141,311.41 standard ounces, costing \$129,436.93.

In addition, there was transferred from the Assay Office at New York to the Mint at Philadelphia during the year, for use in the coinage of the standard silver dollar, silver bullion amounting to 534,936.87 standard ounces, at a value or cost to the government of \$550,232.83. This silver had accumulated at the Assay Office at New York from partings and bar-charges and fractions.

Thus it will be seen that the total amount of silver purchased in these different ways for the silver-dollar coinage during the fiscal year was 25,211,836.60 standard ounces, at a cost to the government of \$23,448,960.01, the average cost per standard ounce being \$0.930077, equivalent to \$1.03342 per ounce fine.

In addition to the silver purchased for the silver-dollar coinage, the Melter and Refiner of the Mint at Philadelphia, under instructions from this Bureau, deposited with the superintendent 1,980.12 standard ounces of silver bullion, costing \$1,936.62, which was the exact amount and value of three silver bars missed by this officer during the fiscal

year 1884-85, and supposed to have been stolen, reference to which was made on pages 14 and 20 of my report for the fiscal year 1885.

This amount, 1,980.12 standard ounces, costing \$1,936.62, formed a portion of the stock of silver bullion used in the coinage of standard silver dollars during the year.

This, added to the amount above stated, 25,211,836.60 standard ounces, costing \$23,448,960.01, gives as the total stock of silver bullion acquired for the silver-dollar coinage during the year 25,213,816.72 standard ounces, costing \$23,450,896.63.

The purchases of silver bullion for the silver-dollar coinage during the year are exhibited in the following table:

BULLION FOR THE SILVER-DOLLAR COINAGE.

Mode of acquisition.	Standard ounces.	Cost.
Department purchases.....	24, 290, 413. 76	\$22, 547, 582 00
Purchases by mint officers.....	239, 174. 56	221, 707 65
Partings, bar-charges, and fractions.....	141, 311. 41	129, 436 93
Transferred from the Assay Office at New York.....	534, 936. 87	550, 232 83
Deposited by Melter and Refiner of the Mint at Philadelphia.	1, 980. 12	1, 936 62
Total.....	25, 213, 816. 72	23, 450, 896 63

The stock of silver bullion on hand at the several coinage mints July 1, 1885, available for the silver-dollar coinage was 3,731,901.12 standard ounces, costing \$3,627,682.32 (not including 1,980.12 standard ounces, costing \$1,936.62, carried in "suspense account.") There was delivered at the mints on purchases during the year as stated 25,213,816.72 standard ounces, at a cost of \$23,450,896.63, making the total amount of silver applicable to the silver-dollar coinage 28,945,717.84 standard ounces, costing \$27,078,578.95.

The number of silver dollars coined during the year was 29,838,905. The amount of silver consumed in this coinage was 25,642,808.98 standard ounces, costing \$24,075,054. The silver wasted by the operative officers and sold in sweeps during the year was *44,413.20 standard ounces, costing \$42,555.93, making the total consumption of silver during the year 25,687,222.18 standard ounces, costing \$24,117,609.93. The balance of silver bullion on hand at the coinage mints June 30, 1886, available for the silver-dollar coinage was 3,258,495.66 standard ounces, costing \$2,960,969.02.

The average cost of the silver consumed during the year was \$0.938895 per ounce standard, equivalent to \$1.04321 per ounce fine.

In addition to the purchases of silver for the silver-dollar coinage, the amount of silver parted from gold at the Assay Office at New York and received in payment of charges and bar-fractions during the year was 152,528.43 standard ounces, at a cost to the Government of \$144,136.32. This is not treated as a purchase of silver for the silver-dollar coinage, but is inseparably connected with the receipt of gold and silver deposits at the Assay Office at New York. The silver so received is from time to time, when not required at the Assay Office at New York for payment of deposits of fine bars, transferred to the Mint at Philadelphia at its cost value, and then becomes a part of the silver purchases of the year in which transferred.

* Includes .01 standard ounce, costing \$.02, transferred to "Uncurrent Silver Coinage" account.

Of the amount of silver partings and bar-charges purchased at the Assay Office at New York during the year, as above mentioned, 123,848.82 standard ounces, costing \$116,088.80, were transferred to the Mint at Philadelphia, and are included in the silver purchases of the year as already stated.

The difference between this amount and the total amount transferred from the Assay Office at New York during the year (534,936.87 standard ounces, costing \$550,232.83), viz., 411,088.05 standard ounces, costing \$434,134.03, consisted of silver parted from gold at the Assay Office at New York and of silver received in payment of charges and bar-fractions prior to the commencement of the fiscal year 1885-'86.

At the average monthly price of silver, it was necessary to purchase during the fiscal year 25,642,462 standard ounces in order to obtain \$2,000,000 worth of silver bullion monthly, as required by law. The amount actually acquired was, as stated, 25,211,866 standard ounces. It may be well to note that this latter amount represents the deliveries at the mints during the year on silver purchases (including the transfers and local purchases), and that the amount actually purchased (contracted for, including the transfers, partings, &c.), was, in round figures, 25,783,200, being slightly in excess of the minimum amount required by law to be purchased.

The deliveries during the year on purchases (25,211,836.60 standard ounces, costing \$23,448,960.01) at the several mints are shown in the following table:

DELIVERIES ON PURCHASES OF SILVER BULLION.

Mints.	Standard ounces.	Cost.
Philadelphia	17, 016, 477. 66	\$15, 877, 902 47
New Orleans	7, 894, 800. 52	7, 299, 612 81
San Francisco	300, 328. 84	271, 221 61
Carson.....	229. 58	223 12
Total	25, 211, 836. 60	23, 448, 960 01

There has been no purchase of silver bullion for the silver-dollar coinage at San Francisco during the year, except such silver as was necessary for the special requirements of its refinery, and the silver parted from gold deposits and contained in charges and bar-fractions on silver deposits for bars.

At the Mint at Carson the purchase of silver was suspended prior to the beginning of the fiscal year, the only silver purchased during the year amounting to 229.58 standard ounces, at a cost of \$223.12, and consisting of partings and bar-charges. The purchase of silver, as well as the coinage of the silver dollar, has been confined exclusively to the mints at Philadelphia and New Orleans, where the silver could be more economically obtained and the coinage executed with greater advantage to the government.

SUBSIDIARY SILVER COINAGE.

No silver was purchased during the year for purposes of the subsidiary coinage.

Uncurrent silver coin, however, in the Treasury, weighing 115,169.65 standard ounces, possessing a coining value in subsidiary silver of \$143,290.39, was transferred from the Treasury of the United States to the Mint at Philadelphia for recoinage into dimes.

The amount of silver bullion on hand at the mints July 1, 1885, available for subsidiary coinage was *37,144.16 standard ounces of the value of \$45,958.71. Adding to this the amount of uncurrent silver coins transferred from the Treasury, the total amount of silver at the mints available for purposes of the subsidiary coinage during the year was 152,313.81 standard ounces of the value of \$189,219.10. Of this there was consumed in the coinage of subsidiary silver 147,442.28 standard ounces, costing the mint \$183,380.57, and making subsidiary silver of the face value of \$183,442.95, being a profit of \$62.38.

The character of the subsidiary coinage executed during the year was:

Halves	\$3, 052 50
Quarters.....	3, 026 95
Dimes	176, 764 50
Total	183, 442 95

The balance of silver bullion on hand June 30, 1886 (all being at the Mint at Philadelphia), available for the coinage of subsidiary silver, amounted to 4,871.54 standard ounces, costing \$5,568.53.

In explanation of the cost of the silver used in subsidiary coinage, as compared with that used in the coinage of the standard silver dollar, it is proper to state that most of the silver used in the coinage of subsidiary silver consisted of uncurrent silver coins in the Treasury. When coins of this description are transferred from the Treasury to a mint for re-coinage, the full coining value in subsidiary silver of the pieces transferred is allowed by the mint and becomes the cost to the institution by which such silver is coined.

There has been a demand for some time past for dimes. The mints have therefore been called upon to recoin other silver coins into dimes. The fact that there is a large accumulation in the Treasury of fifty and twenty-five cent silver pieces tends to indicate that the coinage of those denominations has been in excess of the requirements of the public.

The stock of subsidiary silver in the Treasury consists almost exclusively of these two denominations. It seems desirable, therefore, instead of buying silver for the coinage of dimes, for which there is a pressing demand, to re-coin the worn twenty-five and fifty cent pieces in the Treasury, and uncurrent three, five, and twenty-cent pieces which may be presented to the Treasury for redemption.

This could readily be done by act of Congress appropriating a sufficient amount to pay the loss on such recoinage, being the difference between the face value of the coins as received in the Treasury and the amount of silver which they will actually produce in coin when re-coined.

DISTRIBUTION OF SILVER DOLLARS.

In the accompanying table is exhibited in detail the distribution of silver dollars by the mints of the United States during the fiscal year.

It will be noticed that during the fiscal year 30,250,000 silver dollars were transferred from the coinage mints to the Treasury of the United States, and that there were actually paid out at the mints to individuals 11,361,979.

Owing to the very large amount transferred to the Treasury of the United States, the balance of silver dollars at the mints has, notwithstanding the coinage, been decreased during the year, being \$50,482,787 on June 30, 1886, against \$62,255,861 on June 30, 1885.

* This includes .01 standard ounce, costing \$.02, transferred from "Standard Silver Dollar" account.

AMOUNT OF SILVER DOLLARS REPORTED BY THE COINAGE MINTS ON HAND
JUNE 30, 1885, COINED DURING THE YEAR AND ON HAND AT THE CLOSE
OF THE FISCAL YEAR ENDED JUNE 30, 1886.

Period.	Philadel- phia.	San Francisco.	Carson.	New Orleans.	Total.
On hand June 30, 1885.....	10, 834, 087	32, 029, 467	3, 170, 308	10, 231, 999	62, 255, 861
Coinage of fiscal year 1886	20, 463, 905	47, 000	28, 000	9, 300, 000	29, 838, 905
Total.....	31, 297, 992	32, 076, 467	3, 198, 308	25, 521, 999	92, 084, 766
Transferred to United States Treasury.....	.....	10, 000, 000	3, 100, 000	17, 150, 000	30, 250, 000
	31, 297, 992	22, 076, 467	98, 308	8, 371, 999	61, 834, 766
Transferred from United States Mint at Carson .....	.....	18, 072	.....	.....	.....
Transferred to United States Mint at San Francisco .....	.....	.....	18, 072	.....	.....
	31, 297, 992	22, 094, 539	80, 236	8, 371, 999	61, 844, 766
In Mints June 30, 1886.....	27, 974, 020	19, 229, 530	.....	8, 279, 237	50, 482, 787
Distributed	3, 323, 972	2, 865, 009	80, 236	5, 092, 762	11, 361, 979

SEIGNORAGE ON SILVER COINAGE.

The seignorage on the coinage of silver dollars during the fiscal year—being the difference between the cost of the bullion and the face value of the pieces coined—amounted to \$5,763,851. The seignorage on subsidiary silver coin manufactured at the Mint at Philadelphia amounted to \$62.38. The total seignorage on silver coin manufactured during the fiscal year was \$5,763,913.38.

The balance of profits on the coinage of silver remaining in the possession of the officers in charge of the coinage mints on the 30th June, 1885, was, as stated on page 9 of my report for the last fiscal year, \$725,366.07. Adding to this the above-mentioned profits of the year—\$5,763,913.38—makes a total of \$6,489,279.45 of silver profits to be accounted for by the mints during the fiscal year. Of this amount the sum of \$167,763.42 was paid for expenses in distributing the coin, all of which, except \$457.85, was for silver dollars. In addition, the sum of \$16,966.87 of the profits was used to reimburse the mints for the losses arising from the wastages of the melters and coiners in the manufacture of silver dollars and the loss on the sale of silver in sweeps during the fiscal year.

The sum of \$5,751,347.72 was deposited in the Treasury of the United States, as shown by the warrants in the statement of seignorage in the Appendix to this report, leaving a balance of \$553,201.44 in the coinage mints at the close of the fiscal year, as follows:

Philadelphia.....	\$346, 834 99
San Francisco	21, 866 96
New Orleans.....	184, 499 49
Total.....	553, 201 44

The above balance was verified June 30, 1886, by representatives of this Bureau, who were sent to each of the coinage mints in operation, for the purpose of ascertaining by actual weight and count whether or not the officer in charge had in his possession the moneys called for by the books of the Treasury Department, as well as to superintend the

annual settlement between the superintendent and the operative officers. Of this balance the amount at the Philadelphia Mint, \$346,834.99, has since been covered into the Treasury by certificate of deposit No. 37286, and the balance at New Orleans, \$184,499.49, by certificate of deposit No. 37129, leaving the remainder at the Mint at San Francisco, which it is expedient to keep at that institution. No silver coinage having been executed at that mint for the last eleven months of the fiscal year, it is necessary to retain a portion of the silver-profit fund to pay the cost of distributing the coin still on hand.

The seignorage on the coinage of silver from July 1, 1878, to the close of the fiscal year ended June 30, 1886, has amounted to \$31,102,303.35. To this is to be added the balance on hand at the coinage mints July 1, 1878, the beginning of the fiscal year following the passage of the act authorizing the issue of silver dollars. This balance was \$424,725.47. There is also to be added \$9,237.54, refunded by Adams Express Company for overcharges in their bills for shipping silver dollars, and \$4,560.30, consisting of surplus silver bullion and profits arising from the adjustment of silver values, which sum, while not strictly seignorage on silver coinage, was carried to the credit of the silver-profit fund. These items make a total of silver profits to be accounted for of \$31,540,826.66.

Of this amount the sum of \$651,541.65 has been paid for expenses connected with distributing silver coins. The sum of \$187,917.02 has been paid for wastage in connection with the silver-dollar coinage and for losses on sale of sweeps attending that coinage, thus leaving the net profit for the eight years, including the balance in the mints on July 1, 1878, on the manufacture of silver coins, \$30,701,367.99.

Of this amount the sum of \$30,148,166.55 has been covered into the Treasury of the United States by covering warrants as profits on the coinage of silver prior to the close of the fiscal year ended June 30, 1886. The balance, amounting to \$553,201.44, was, as previously stated, in the possession of the coinage mints at that date and verified by actual count.

Of that balance all except the amount at the mint at San Francisco has since been deposited in the Treasury of the United States.

In the Appendix will be found a statement showing in detail the profits on the coinage of silver during the fiscal year, and the disposition of the same.

COURSE OF THE PRICE OF SILVER.

At the date of the passage of the act authorizing the coinage of the standard dollar, February 28, 1878, the London price for silver was 55 pence per ounce, British standard, equivalent to \$1.20566 per ounce fine, at which price the intrinsic value of the United States silver dollar, was \$0.93 $\frac{1}{4}$.

At no time since the passage of the act has the price of silver reached 55 pence, the tendency having been steadily downward, with occasional temporary advances which were not maintained for any considerable time. During the past year the decline has been very marked, especially since January 1st of the present year.

On July 1, 1885, the London price of silver was 49 $\frac{1}{4}$ pence per ounce, British standard, equivalent to \$1.07961 per ounce fine, while on June 30, 1886, the London price was 44 $\frac{1}{8}$ pence per ounce, British standard, equivalent to \$0.9796, showing a decline during the year of over ten cents per ounce.

Since the close of the fiscal year there has been a further decline, until on July 31, 1886, the price of silver reached 42 pence per ounce,

British standard, equivalent to \$0.92068 per ounce fine, which was the lowest price silver has ever reached. At the latter price the bullion value of the silver dollar, measured by the market price of silver, was \$0.712088.

The price has since advanced until at the present writing (October 20, 1886) it is 45½ pence per ounce, British standard, equivalent at the par of exchange to \$0.9878 per ounce fine.

In the Appendix will be found a table showing the ratio of silver to gold each year since 1687.

Also a table showing the highest, lowest and average price of fine silver in London and its equivalent in United States money each year since 1833.

Also a table showing the highest, lowest and average value intrinsically of the United States silver dollar measured by the gold standard, and the quantity of fine silver purchasable with a United States silver dollar at the average London price of silver since 1873.

* * * * *

ANNUAL TRIAL OF COINS.

The following gentlemen were designated by the President as commissioners to test and examine the weight and fineness of the coins reserved at the several mints during the year 1885, pursuant to the provisions of Section 3547 of the Revised Statutes: Hon. Isham G. Harris, United States Senate; Hon. James B. McCreery, House of Representatives; Thomas K. Bruner, Salisbury, N. C.; Prof. T. C. Chamberlin, Beloit, Wis.; Prof. Charles F. Chandler, Columbia College, New York; Prof. John A. Church, Prescott, Ariz.; Walter B. Devereux, Aspen, Colo.; H. L. Dodge, San Francisco; Prof. Thomas M. Drown, Institute of Technology, Boston; Prof. B. W. Frazier, Lehigh University, Bethlehem, Penn.; Dr. W. P. Lawver, Bureau of the Mint, Washington; Prof. J. W. Mallet, University of Virginia, Charlottesville; Henry T. Martin, Albany, N. Y.; Prof. Ira Remsen, Johns Hopkins University, Baltimore.

The *ex officio* members present were, namely: Hon. William Butler, Judge of the United States District Court for the Eastern district of Pennsylvania; Mr. Herbert G. Torrey, the Assayer of the Assay Office at New York.

The commission met at Philadelphia on the 10th of February, 1886.

Tests were made of the weight and fineness of the coins reserved from deliveries at each mint by the coiner to the superintendent in each month of the year.

The Committee on Counting reported as follows:

The packages of coins reserved for assay by the several mints, in accordance with Section 3539, Revised Statutes, were delivered to us by the Superintendent of the Mint at Philadelphia. The seals were found intact. The packages were opened and the coins counted in the following order:

1. Gold coins from the Mint at Philadelphia, 917 in number, of the value of \$5,910.50.
2. Silver coins from the Mint at Philadelphia, 10,195 in number, of the value of \$9,033.75.
3. Silver coins from the Mint at New Orleans, 4,593 in number, of the value of \$4,593. No gold coins were made at this mint.
4. Gold coins from the Mint at San Francisco, 2,124 in number, of the value of \$22,020.
5. Silver coins from the Mint at San Francisco, 772 in number, of the value of \$751.30.
6. Gold coins from the Mint at Carson, 11 in number, of the value of \$220.
7. Silver coins from the Mint at Carson, 114 in number, of the value of \$114; making a total of 18,726 coins, of the value of \$42,642.55, as set forth in detail in the schedule accompanying this report.

The packages were opened, examined, and counted by ourselves, and upon comparison with the schedules sent to the Director of the Mint by the several superintendents, after correcting a few clerical errors, were found to be correct.

Such of the reserved coins as were required by the Committees on Weighing and Assaying, respectively, for their purposes, were taken indiscriminately from the parcels in which they were found, so as to include coins from at least two deliveries of different dates in each month of 1885, when two or more deliveries were made in such month. All of the reserved coins not so taken by either of the Committees on Weighing or Assaying were returned by us to the Superintendent of the Mint at Philadelphia, and the coins taken by the Committee on Weighing were subsequently returned to us and by us counted, verified, and delivered to the Superintendent of the Mint at Philadelphia. The bullion resulting from the coins taken by the Committee on Assaying was returned to us and by us delivered to the same officer.

The Committee on Weighing reported that—

The coins tested by them were all within the legal limit of tolerance.

Also, that, as required by Section 3549 of the Revised Statutes, the weights ordinarily used in the Mint at Philadelphia had been tested by the standard troy pound of the mint and found to be correct.

The Committee on Assaying reported that—

In accordance with the law and regulations governing this Commission, we have taken samples from the gold and silver coins reserved for assay at the mints of the United States, to wit, Philadelphia, San Francisco, Carson City, and New Orleans, as stated in annexed schedules, the samples representing the deliveries mentioned in the year 1885 from the coiners to the superintendents, and have assayed the same in mass, and also the individual coins; that the greatest excess in the assay value of the gold coinage above the standard at the different mints (while the limit of tolerance is one-thousandth) is, at—

Philadelphia, .4 of .001.

San Francisco, no coin in excess.

Carson City, no coin in excess.

The greatest deficiency below the standard (the limit of tolerance being one-thousandth) is, at—

Philadelphia, .2 of .001.

San Francisco, .6 of .001.

Carson City, .2 of .001.

For silver, the maximum assay above the standard (the limit of tolerance being three one-thousandths) is, at—

Philadelphia, .2 of .001.

New Orleans, .9 of .001.

San Francisco, .4 of .001.

Carson City, .4 of .001.

The greatest deficiency below the standard (the tolerance being three one-thousandths) is, at—

Philadelphia, 1.1 of .001.

New Orleans, .7 of .001.

San Francisco, 1.1 of .001.

Carson City, .9 of .001.

The Assay Committee has also tested the inquartation silver, the copper, and the lead used in assaying gold bullion, and found them free from gold. The weights employed were also tested, and found to be correct. The acid used for the humid assay of silver was carefully tested, and found to contain neither silver nor chlorine in perceptible quantity.

The committee therefore deems the assays exhibited in the foregoing schedules to be trustworthy.

It thus appears that no coin was found among those examined which deviated from the standard fixed by law beyond the legal tolerance.

Whereupon the Commission reported—

That the Assay Commission having examined and tested the reserved coins of the several mints for the year 1885, and it appearing that these coins are within the tolerance prescribed by law, the trial is considered and reported as satisfactory.

The trial of the coins by the Assay Commission showed that the average fineness of 428 pieces of the gold coinage of the mints at Philadelphia and San Francisco, melted in mass, was .899937, and of 39 pieces tested singly, .899894.

The monthly tests made during the year in the Assay Laboratory under my direction showed an average for 142 pieces, tested singly, of

~~.899942~~.899942, corresponding almost exactly with the results of the Annual Commission. The Commission ascertained that the average fineness of 1,600 pieces of the silver dollars coined at the several mints, melted in mass was .900040, and of 30 pieces tested singly, .899883.

The monthly tests made in the Laboratory of this Bureau showed an average fineness of 265 silver dollars, tested singly, of .900048. The result of both the annual and monthly tests served to demonstrate that the coinage of the year was very close to the standard fixed by law, notwithstanding the magnitude of the coinage operations of the year.

VALUE OF FOREIGN COINS.

Pursuant to the provisions of section 3564 of the Revised Statutes of the United States, the values of the standard coins of the various nations of the world were estimated by me and proclaimed by the Secretary of the Treasury on 1st January, 1886. The values of said metallic currencies adopted in the custom-houses for the determination of foreign units of value on and after January 1, 1886, were as follows:

VALUES OF FOREIGN COINS.

Country.	Monetary unit.	Standard.	Par of exchange or equivalent value in terms of U. S. gold dollar.
Argentine Republic	Peso	Double	\$9. 96, 5
Austria	Florin	Single silver .....	. 37, 1
Belgium	Franc	Double .....	. 19, 3
Bolivia	Boliviano	Single silver .....	. 75, 1
Brazil	Milreis of 1,000 reis	Single gold .....	. 54, 6
British Possessions, N. A.	Dollar	Single gold	1. 00
Chili	Peso	Double .....	. 91, 2
Cuba	Peso	Double .....	. 93, 2
Denmark	Crown	Single gold .....	. 26, 8
Ecuador	Peso	Single silver .....	. 75, 1
Egypt	Piastre	Single gold .....	. 64, 9
France	Franc	Double .....	. 19, 3
German Empire	Mark	Single gold .....	. 23, 8
Great Britain	Pound sterling	Single gold	4. 93, 6½
Greece	Drachma	Double .....	. 19, 3
Haiti	Gourde	Double .....	. 96, 5
India	Rupee of 16 annas	Single silver .....	. 35, 7
Italy	Lira	Double .....	. 19, 3
Japan	Yen	Single silver .....	. 81, 0
Liberia	Dollar	Single gold	1. 00
Mexico	Dollar	Single silver .....	. 81, 6
Netherlands	Florin	Double .....	. 40, 2
Norway	Crown	Single gold .....	. 26, 8
Peru	Sol	Single silver .....	. 75, 1
Portugal	Milreis of 1,000 reis	Single gold	1. 08
Russia	Rouble of 100 copecks	Single silver .....	. 60, 1
Spain	Peseta of 100 centimes	Double .....	. 19, 3
Sweden	Crown	Single gold .....	. 26, 8
Switzerland	Franc	Double .....	. 19, 3
Tripoli	Mahbub of 20 piastres	Single silver .....	. 67, 7
Turkey	Piastre	Single gold .....	. 64, 4
United States of Colombia	Peso	Single silver .....	. 75, 1
Venezuela	Bolivar	Double .....	. 19, 3

The method of estimating the value of these coins is explained in the following communication from the Computer of Bullion of this Bureau:

TREASURY DEPARTMENT, BUREAU OF THE MINT,
Washington, D. C., December 26, 1885.

SIR: I have the honor to transmit herewith a table showing the values of the standard coins in circulation in the various nations of the world.

The values of the gold coins have been ascertained by comparing the amount of pure metal in each as fixed by the coinage laws of the respective countries with that contained in the United States gold dollar. The values of the silver coins of the countries of the double standard are given at the same valuation as the gold coins of such countries with which they are interchangeable.

The values of the silver coins of countries in which silver is the standard of value have been estimated to be the market value of the pure silver contained in such coins based on the average price of silver bullion in London for the three months ending December 24, 1885, viz, 47.35795 pence per ounce, British standard, equivalent to \$1.038141 per ounce fine.

Very respectfully,

E. O. LEECH,
Computer of Bullion.

DR. JAMES P. KIMBALL,
Director of the Mint.

The market value of silver at which the silver coins were computed on 1st January, 1885, was \$1.099465 per ounce fine, and the rate at which the silver coins were computed for 1886 was \$1.038141, a decline of over six cents per ounce fine in the price of silver during the year. This occasioned a change in the value given the following coins:

Coins.	Value January 1, 1885.	Value January 1, 1886.
Florin of Austria .....	.39, 3	.37, 1
Boliviano of Bolivia.....	.79, 5	.75, 1
Peso of Ecuador .....	.79, 5	.75, 1
Rupee of India.....	.37, 8	.35, 7
Yen of Japan .....	.85, 8	.81
Dollar of Mexico.....	.86, 4	.81, 6
Sol of Peru .....	.79, 5	.75, 1
Rouble of Russia .....	.63, 6	.60, 1
Mahbub of Tripoli.....	.71, 7	.67, 7
Peso of United States of Colombia .....	.79, 5	.75, 1

IMPORTS AND EXPORTS OF GOLD AND SILVER COIN AND BULLION.

The value of the gold bullion imported into the United States during the fiscal year 1886, as registered at the custom-houses, was \$4,073,458, and the amount of gold bullion exported during the same period \$27,365,090. The United States therefore lost by export of gold bullion during the year \$23,291,632. Of the gold bullion exported, all except about \$1,000,000 worth consisted of United States mint and assay office bars. The export of gold bullion seemed to commence in December, 1885, reaching its height in the month of March, when over \$7,000,000 worth was exported, while the imports of gold bullion were almost entirely in the early part of the fiscal year.

The amount of gold bullion deposited at the mints and assay offices during the year, classified as "foreign bullion," was \$4,317,068.28 against \$4,073,458 registered at the custom-houses as having been imported—practically the same amount. This is important as affording

additional evidence that the classification of bullion at the mints and assay offices as between foreign and domestic production is practically correct.

The import of gold coin into the United States during the year was—

Of American gold coin	\$1,687,231
Of foreign gold coin.....	14,982,660
Total.....	16,669,891

The amount of gold coin exported was, of American \$5,400,976, and of foreign \$10,039,941. Hence a net export of American gold coin of \$3,713,745, and a gain by import of foreign coin of \$4,942,719. The latter corresponds very nearly with the amount of foreign gold coin deposited at the mints and assay offices during the year, namely, \$5,673,565.03. The excess of the foreign coins deposited at the mints over and above the amount registered as imported at the custom-houses may be assumed to have reached this country on the persons of immigrants and travelers.

The imports of silver bullion during the year amounted to \$4,151,438, reckoned, presumably, at the commercial value of silver. The exports during the same year amounted to \$18,693,313, of which \$14,217,273 consisted of bullion not bearing the stamp of a United States mint or assay office. The net excess of the exportation of silver bullion over the importation of the same during the year was \$14,541,875. The amount of silver bullion other than bars imported into the country was \$1,872,628.

The imports of silver coin during the year amounted to—

Foreign	\$13,178,589
American	520,280
Total.....	13,698,869

The exports of American coin were \$464,738, of which \$354,848 consisted of trade-dollars. The exports of foreign silver coin were \$10,315,918, the total silver coin exported being \$10,780,656. The excess of the manifested imports of foreign silver coin over the manifested exports of the same amounted during the year to \$2,862,671. The value of foreign silver coins deposited at the mints and assay offices of the United States to be melted amounted to \$812,664.51. From this it seems that over 2,000,000 of foreign silver coin remained in the United States during the year.

The total imports of silver, including bullion and coin, foreign and domestic, amounted to \$17,850,307 against \$29,511,219 exported. The total imports of bullion and coin, gold and silver, during the year amounted to \$38,593,656, and the total exports to \$72,463,410.

* * * * *

WORK OF THE BUREAU.

In closing the fourteenth annual report of the Bureau of the Mint, I beg to recur to the expediency referred to in my last annual report, namely, of composing and maintaining the official and clerical staff of the Bureau with special reference to its peculiar requirements, and particularly that promotions be available in the Bureau itself rather than sought outside of it.

During the last year the Bureau has been more than once embarrassed by the transfer and promotion of clerks trained to the techni-

cal work of its own counting-rooms, on account of the limitations of its specific appropriations. In the expert character of the work required at the hands of the essential part of the clerical force, this Bureau is probably unlike any other bureau or division of the Treasury Department.

It would not, indeed, be impossible for such conditions to arise as would lead to great difficulty in the performance of the work of the Bureau through the loss of experience personal to a number of those now upon its roll, under the circumstance that no regular course can be followed for the advancement and retention of meritorious clerks.

I take pleasure in acknowledging the zeal and fidelity with which the work of this Bureau has been executed by its clerical staff during the past year, especially in the laborious preparation of its two annual reports, namely, the one here submitted, and the Report on the Production of the Precious Metals for the calendar year 1885.

In this, as in the latter report, the editorial and statistical labors have been shared with the Computer of Bullion, Mr. E. O. Leech.

I am, very respectfully, yours,

JAMES P. KIMBALL,
Director of the Mint.

REPORT OF THE COMMISSIONER OF INTERNAL REVENUE.

TREASURY DEPARTMENT,
OFFICE OF INTERNAL REVENUE,
Washington, D. C., November 1, 1886.

SIR: In compliance with the instructions contained in your letter of August 25, 1886, I have the honor to submit the annual report of the Commissioner of Internal Revenue for the fiscal year ended June 30, 1886; also, certain additional information concerning the work of this Bureau during the months of July, August, and September of the current fiscal year.

In the appendix to the bound volume of this report will be found carefully prepared tables, as follows:

Table A, showing the receipts from each specific source of revenue, and the amounts refunded in each collection district, State, and Territory of the United States, for the fiscal year ended June 30, 1886.

Table B, showing the number and value of internal-revenue stamps ordered from the office of the Commissioner; the receipts from the sale of stamps, and the number and value of stamps for special taxes, tobacco, cigars, cigarettes, snuff, distilled spirits, and fermented liquors, issued monthly to collectors, during the fiscal year ended June 30, 1886.

Table C, showing the percentages of receipts from the several general sources of revenue in each State and Territory of the United States to the aggregate receipts from the same sources, by fiscal years, from July 1, 1863, to June 30, 1886.

Table D, showing the aggregate receipts from all sources in each collection district, State, and Territory of the United States, by fiscal years, from September 1, 1862, to June 30, 1886.

Table E, showing the receipts in the United States from each specific source of revenue now taxable, by fiscal years, from September 1, 1862, to June 30, 1886.

Table F, showing the ratio of receipts in the United States from specific sources of revenue to the aggregate receipts from all sources, by fiscal years, from July 1, 1863, to June 30, 1886.

Table G, showing the returns of distilled spirits, fermented liquors,

manufactured tobacco, snuff, cigars, and cigarettes, under the several acts of legislation, and by fiscal years, from September 1, 1862, to June 30, 1886.

Table H, showing the receipts from special taxes in the several States and Territories for the special-tax year ended April 30, 1886.

Table I. Abstract of reports of district attorneys concerning suits and prosecutions under the internal-revenue laws during the fiscal year ended June 30, 1886.

Table K. Abstract of seizures of property for violation of internal-revenue laws during the fiscal year ended June 30, 1886.

COLLECTIONS FOR THE PRESENT FISCAL YEAR.

It is estimated that the sum of \$118,000,000 will be collected during the current fiscal year from the various sources of internal revenue.

In making this estimate, however, this office is much embarrassed by the presence of a new source of revenue, oleomargarine, and the entire absence of any statistical information as to the quantity manufactured, the number of factories engaged in its production, and the number of persons or firms engaged in selling the same as wholesale and retail dealers.

It was estimated that the receipts for the fiscal year ended June 30, 1886, would be not less than \$115,000,000. I am gratified to state that the actual receipts exceeded that sum by \$1,902,869.44.

COMPARATIVE RECEIPTS FOR THE LAST FIVE FISCAL YEARS.

The total receipts from all sources of internal-revenue taxation for the fiscal year ended June 30, 1886, were \$116,902,869.44 as compared with \$112,421,121.07 for the year 1885, \$121,590,039.83 for the year 1884, \$144,553,344.86 for the year 1883, and \$146,523,273.72 for the year 1882.

The following statements exhibit in detail the amount of internal revenue collected during the past year, and also for the first three months of the current fiscal year, the sources from which the revenue is derived, the States and districts in which the collections were made during the past year, the cost of collection, &c.:

INTERNAL-REVENUE RECEIPTS DURING THE LAST TWO FISCAL YEARS.

COMPARATIVE STATEMENT showing the RECEIPTS from the SEVERAL OBJECTS of INTERNAL TAXATION in the UNITED STATES during the fiscal years ended June 30, 1885 and 1886.

Objects of taxation.	Receipts during fiscal year ended June 30—		Increase.	Decrease.
	1885.	1886.		
SPIRITS.				
Spirits distilled from apples, peaches, and grapes	\$1, 321, 897 58	\$1, 400, 394 48	\$78, 496 90	.....
Spirits distilled from grain and other ma- terials	60, 920, 324 39	62, 305, 825 13	1, 445, 500 74	.....
Rectifiers (special tax)	167, 930 23	178, 650 17	10, 719 94	.....
Retail liquor dealers (special tax)	4, 641, 783 99	4, 714, 735 13	72, 951 19	.....
Wholesale liquor dealers (special tax)	415, 503 49	418, 406 24	2, 902 75	.....
Manufacturers of stills (special tax)	1, 194 20	1, 102 90	.....	\$91 30
Stills and worms manufactured (special tax)	2, 665 45	3, 000 00	334 55	.....
Stamps for distilled spirits intended for export	39, 909 30	10, 151 90	.....	29, 757 40
Total	67, 611, 208 63	69, 092, 266 00	1, 381, 057 37	.....

COMPARATIVE STATEMENT showing the RECEIPTS from the SEVERAL OBJECTS OF INTERNAL TAXATION, &c.—Continued.

Objects of taxation.	Receipts during fiscal year ended June 30—		Increase.	Decrease.
	1885.	1886.		
TOBACCO.				
Cigars and cheroots.....	\$10,077,287 50	\$10,532,804 05	\$455,516 55	.....
Cigarettes	529,535 88	655,569 55	126,033 67	.....
Snuff	508,943 52	493,283 80	.....	\$15,659 72
Tobacco, chewing and smoking.....	13,953,410 31	14,834,095 42	880,685 11	.....
Dealers in leaf tobacco (special tax)	53,352 87	53,875 03	522 76	.....
Dealers in manufactured tobacco (special tax).....	1,159,897 78	1,208,529 17	48,631 39	.....
Manufacturers of tobacco (special tax)	5,320 25	5,575 85	255 60	.....
Manufacturers of cigars (special tax).....	105,139 81	108,693 45	3,555 64	.....
Peddlers of tobacco (special tax).....	14,200 56	14,933 61	733 05	.....
Total	26,407,068 48	27,907,362 53	1,500,274 05	.....
FERMENTED LIQUORS.				
Ale, beer, lager beer, and porter.....	17,747,006 11	19,157,612 87	1,410,606 76	.....
Brewers (special tax)	183,561 67	186,928 89	3,367 22	.....
Dealers in malt liquors (special tax)	300,214 25	332,189 53	31,975 28	.....
Total	18,230,782 03	19,676,731 29	1,445,949 26	.....
BANKS AND BANKERS, NOT NATIONAL.				
Bank circulation other than national, and banks, bankers, and other parties liable on amount of any person, State bank, or State banking association, or of any town, city, or municipal corporation, paid out by them	25,000 00	.....	.....	25,000 00
Total	25,000 00	.....	.....	25,000 00
MISCELLANEOUS.				
Collections not otherwise provided for.....	24,360 74	32,087 17	7,726 43	.....
Penalties	222,681 19	194,422 45	.....	28,258 74
Total	247,041 93	226,509 62	.....	20,532 31
Aggregate receipts	112,421,121 07	116,902,869 44	4,481,748 37	.....

WITHDRAWALS FOR CONSUMPTION DURING THE LAST TWO FISCAL YEARS.

The quantities of distilled spirits, fermented liquors, manufactured tobacco, snuff, cigars, and cigarettes, on which tax was paid during the last two fiscal years, are as follows:

Articles taxed.	Fiscal year ended June 30—		Increase.	Decrease.
	1885.	1886.		
Number of gallons of spirits distilled from apples, peaches, and grapes.....	1,468,775	1,555,904	87,219	.....
Number of gallons of spirits distilled from grain and other materials.....	67,689,250	69,295,391	1,606,111	.....
Number of cigars	3,358,972,633	3,510,898,488	151,925,855	.....
Number of cigarettes	1,058,740,238	1,310,961,350	252,212,112	.....
Number of pounds of snuff	6,361,794	6,166,047	.....	195,747
Number of pounds of tobacco.....	174,415,619	185,426,103	11,010,574	.....
Number of barrels of fermented liquors....	19,185,953	20,710,933	1,524,980	.....

NOTE.—Many detailed tabular statements, omitted for want of space, may be found in the bound volumes of the Commissioner's report.

COLLECTIONS BY STATES AND TERRITORIES DURING THE LAST FISCAL YEAR.

STATEMENT showing the AGGREGATE COLLECTIONS of INTERNAL REVENUE, by STATES and TERRITORIES, during the fiscal year ended June 30, 1886.

States and Territories.	Aggregate collections.	States and Territories.	Aggregate collections.
Alabama	\$81,088 08	New Hampshire	\$378,787 72
Arkansas	94,893 08	New Jersey	3,951,675 75
California	2,090,784 84	New Mexico <i>g</i>	65,123 81
Colorado <i>a</i>	201,482 46	New York	14,363,208 96
Connecticut	461,971 84	North Carolina	1,744,959 29
Delaware <i>b</i>	244,476 25	Ohio	12,921,349 10
Florida	237,271 82	Oregon <i>h</i>	124,034 27
Georgia	304,384 29	Pennsylvania	7,847,230 56
Illinois	23,852,252 60	Rhode Island	132,081 73
Indiana	4,873,230 48	South Carolina	100,014 30
Iowa	2,547,340 94	Tennessee	1,024,912 62
Kansas	204,145 48	Texas	196,850 59
Kentucky	15,746,940 59	Vermont	32,503 17
Louisiana	552,115 30	Virginia	2,082,727 70
Maine	57,800 79	West Virginia	488,062 88
Maryland <i>c</i>	2,462,092 46	Wisconsin	3,095,316 63
Massachusetts	2,292,678 83		
Michigan	1,671,994 45	Total by States and Territories	116,891,982 21
Minnesota	534,532 31		
Mississippi	47,062 35	Cash receipts from sale of adhesive stamps	7,887 23
Missouri	7,000,651 99		
Montana <i>d</i>	90,840 37	Aggregate receipts	116,902,869 44
Nebraska <i>e</i>	1,674,013 12		
Nevada <i>f</i>	62,148 42		

a Including the Territory of Wyoming.
b Including the State of Delaware, two counties of Virginia, and nine counties of Maryland.
c Including the District of Columbia.
d Including the Territory of Idaho.
e Including the Territory of Dakota.
f Including the Territory of Utah.
g Including the Territory of Arizona.
h Including the Territories of Alaska and Washington.

COST OF COLLECTION.

The cost of collection for the past fiscal year, distributed among the different items of appropriation, was approximately as follows:

For salaries and expenses of collectors, including pay of deputy collectors, clerks, &c	\$1,764,228 87
For salaries and expenses of revenue agents, surveyors of distilleries, gaugers, storekeepers, and miscellaneous expenses	1,834,688 54
For stamps, paper, and dies	409,195 97
For expenses of detecting and punishing violations of internal-revenue laws	42,561 85
For salaries of officers, clerks, and employes in the office of Commissioner of Internal Revenue	248,810 05
Total	4,299,485 28

being about 3.6 per cent. of the amount collected.
The cost of collection for the year 1885 was \$4,455,430.27, which was about 3.9 per cent. of the collections for that year.

GENERAL CONDITION OF THE SERVICE.

Examinations of the offices of the several collectors of internal revenue were frequently made during the fiscal year, and it appears from the reports of such examinations that the condition of the service is good.

OLEOMARGARINE.

Questions having been raised as to whether it was the intention of Congress to levy a tax on the substance heretofore known as oleomargarine and the other substances named in section 2, unless made in imitation or semblance of butter, or when so made calculated to be sold as butter, or for butter, the matter was referred to the Attorney-General by you October 2, 1886, pursuant to my suggestion made October 1, and the Attorney-General rendered an opinion dated October 18, as follows:

DEPARTMENT OF JUSTICE,
Washington, October 18, 1886.

SIR: Your communication of the 2d October, instant, submits for opinion the question whether or not the various simple and compound substances mentioned in the second section of the act of the 2d August, 1886, entitled "An act defining butter, also imposing a tax upon and regulating the manufacture, sale, importation, and exportation of oleomargarine" must be "made in imitation or semblance of butter, or, when so made, calculated or intended to be sold as butter, or for butter," before any of them can be regarded as subjects of taxation under the law.

The question really is whether the language just quoted from the second section of the act is a predicate and qualification of the *whole* section or only of the clause or member in immediate connection with which it is found.

In my opinion the qualification extends to the *whole* section and is an essential element of the statutory definition of *oleomargarine*.

If each of the simple or compound substances mentioned in the law is taxable under the act regardless of whether it is in imitation or semblance of butter, or calculated or intended to be sold as such, it results that some lubricating oils must bear the tax, although not supposed to have been in the contemplation of Congress.

But the language of the law is repugnant to that view. Sections 6, 8, 10, and 13 cannot be understood as applying to fluid substances. In these sections are found directions that oleomargarine shall be "*packed*" in "*firkins, tubs, or other wooden packages*"; that no package shall contain less than "*ten pounds*"; that retail dealers shall *pack* what they sell in suitable wooden "*or paper packages*"; that "*any fractional part of a pound in a package shall be taxed as a pound*"; that the imported article shall, in addition to the import duty, pay an internal-revenue tax of "*fifteen cents per pound*."

Now, as these embrace all the regulations of the kinds mentioned in the act, it would seem to require the conclusion that it was solids and not fluids that the legislature had in view, and therefore that the oils and extracts referred to in section 2 are not taxable as oleomargarine.

We do not speak of *packing* fluids, nor do we estimate their quantity *by weight*, nor is it customary to pack them in firkins or tubs or other like vessels.

Again, if the simple oil is taxable, it must undergo a *repetition* of the tax should it afterwards enter into any one of the combinations or mixtures named in the second section, each of which, upon this theory, must be taxed. So that unless the maker of any of these composite substances produce all its constituents, himself, the double taxation he sustains must put him at a disadvantage when brought into competition with those who do—a very small number, I am informed.

To resolve a doubt upon a statute it is a familiar rule to look at the evil the statute was intended to cure. There can be no question that the object in this case was to protect the trade in legitimate butter from the damage caused by the sale of suppositions butter, by requiring the manufacturers of the latter to distinguish their product by an appropriate brand, and by fettering the production of the article with a tax.

If the words of qualification or restriction at the end of section second apply only to the clause in which they occur, it is rather strange that the definition of butter did not follow them instead of forming the subject of the first section, and being given a prominence that indicates an application commensurate with the whole scope of the law.

I have the honor to be, sir, your obedient servant,

A. H. GARLAND, *Attorney-General*.

THE SECRETARY OF THE TREASURY.

After I received notice of the opinion of the Attorney-General the oleomargarine regulations were amended October 21, 1886, so that said section 2 should be considered as though it read as follows:

That for the purposes of this act certain manufactured substances, certain extracts, and certain mixtures and compounds, including such mixtures and compounds with

butter, shall be known and designated as "oleomargarine" whenever made in imitation or semblance of butter, or, when so made, calculated or intended to be sold as butter or for butter, namely: All substances heretofore known as oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine, and neutral; all mixtures and compounds of oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine, and neutral; all lard extracts and tallow extracts, and all mixtures and compounds of tallow, beef-fat, suet, lard, lard-oil, vegetable oil, annotto, and other coloring matter, intestinal fat, and offal fat.

It is impossible at this time to estimate the amount of internal revenue which will be derived from oleomargarine. If, however, the operation of the law should prove unsatisfactory in its present form, which is construed to levy a tax only upon the article manufactured and sold or removed for consumption or sale as supposititious butter, the law can be so amended as, while imposing a tax upon oleomargarine-oil, neutral, and such like substances without which the supposititious butter cannot be extensively manufactured, to provide also for the use of such substances by subsequent compounders without the payment of a second tax, as rectifiers are allowed to compound distilled spirits on which the tax is paid without paying an additional gallon tax simply by delivering up the original tax-paid stamps and receiving in exchange other stamps representing the same quantity; also for refunding the tax on so much as is used for lubricating purposes or otherwise in the arts and sciences.

In my opinion, the advantage in securing the tax from the manufacturer who derives his material from the slaughtered animals cannot be overestimated. These manufacturers are comparatively few in number. By requiring them to stamp and brand all their productions and to keep such books as will indicate the destination of their products, such products can be followed to the dealers and through the dealers to the consumers.

At the same time, by the use of a system of exchanging stamps similar to that now in operation as to distilled spirits, the article may be readily identified by the consumer without necessitating the imposition of a second tax.

I have the honor to be, very respectfully,

JOS. S. MILLER,
Commissioner.

HON. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF THE COMPTROLLER OF THE CURRENCY.

TREASURY DEPARTMENT,
OFFICE OF COMPTROLLER OF THE CURRENCY,
Washington, December 4, 1886.

Sir: In obedience to law, I have the honor to submit a report for the year ending November 1, 1886, exhibiting—

First. A summary of the state and condition of every association from which reports have been received the preceding year, at the several dates to which such reports refer, with an abstract of the whole amount of banking capital returned by them, of the whole amount of their debts and liabilities, the amount of circulating notes outstanding, and the total amount of means and resources, specifying the amount of lawful money held by them at the times of their several returns.

Second. A statement of the associations whose business has been closed during the year, with the amount of their circulation redeemed and the amount outstanding.

Third. Suggestions as to amendments to the laws relative to banking by which it is thought the system may be improved.

Fourth. A statement exhibiting under appropriate heads the resources and liabilities and condition of the banks, banking companies, and savings banks organized under the laws of the several States and Territories, such information being obtained by the Comptroller from the reports made by such banks, banking companies, and savings-banks to the legislatures or officers of the different States and Territories, and where such reports could not be obtained the deficiency has been supplied from such other authentic sources as were available.

Fifth. The names and compensation of the clerks employed in the office of the Comptroller of the Currency, and the whole amount of the expenses of the banking department during the year.

This is the twenty-fourth annual report of the Comptroller of the Currency.

* * * * *

The security now afforded to the holders of national-bank notes by the deposit of bonds in trust with the Treasurer, seems to be complete, and as long as the bonds of the United States remain (as they now are and have been for some years) readily salable at above ninety cents on the dollar, the national-bank currency will continue to enjoy the confidence of the public.

It must not be lost sight of, however, that there are conceivable contingencies in which the salability of these bonds would be impaired, and the security of the notes correspondingly affected, but the probability of any such contingency is too remote for present consideration, while the provision of law giving to the United States a first lien upon all the assets of the bank for the amount of any deficiency in the proceeds of the bonds would seem to be a sufficient factor of safety in any case.

The security of other creditors depends upon two conditions: first, the proportion of assets to liabilities; and, second, the solid value of the assets. Both proportion and value, in any given case, will depend upon the management of the business of the bank; hence the supervision of the business and management of every bank, by the Comptroller of the Currency, has now become the most important feature of the national banking system.

The laws providing for this supervision, and those which prescribe and limit the character of the business that may be done by the national banks should be frequently revised in order that the light of experience may be utilized to their constant improvement.

To this end I respectfully submit the following suggestions:

First. That section 5137 of the Revised Statutes should be so amended as to express more clearly and definitely the limitation put upon national banks with respect to their dealings in real estate and in mortgages, and to provide a penalty for violation of the law.

Second. That section 5145 be amended by adding the following clause: Whenever the vice-president and the cashier, or either of them, is a director, the board of directors must consist of at least five members besides such officers.

Third. That section 5151 be so amended as to exempt from further liability the shareholders of national banks of which the surplus shall exceed by 20 per cent. the amount of the capital stock of the bank, and that they shall be partially relieved from such responsibility in proportion as the surplus shall exceed the 20 per cent. now required by law. Provision, however, should be made that such exemption cannot be obtained through any process by which capital becomes converted into

surplus, and also that such exemption is not to be enjoyed until after the Comptroller of the Currency is satisfied that the entire capital and surplus are represented by good assets.

Fourth. That section 5160, as modified by the act of July 12, 1882, be so amended as to require that the bonds which every association must at all times have on deposit with the Treasurer shall be registered United States bonds bearing interest.

Fifth. That section 5192, as modified by the act of June 20, 1874, be so amended as to require all banks to keep on hand, or at some centre near their location, a larger proportion of their reserve than that now specified in the law.

The present provision, allowing a part of the reserve to be kept in a distant city, appears to be a survival from the system of redemption formerly existing, which was repealed by the act of June 20, 1874, and its maintenance seems inconsistent with the general policy of the laws as they now exist.

Sixth. That the act of June 20, 1874, be so amended as to make it evident whether banks need keep a reserve on Government deposits secured by bonds.

Seventh. That section 5200 be so amended as to render its application practicable in all cases.

It would appear that when in 1864* a limit was placed upon the accommodation which a national bank might extend to any person, company, corporation, or firm, for money borrowed, Congress had in view the then existing limit as to the number of national banks and as to the formation of new banks, arising out of the limitation upon the total volume of national-bank currency.

At that time the privilege of issuing currency was the most valued of all the privileges conferred by the national-bank act, and the limit upon this restricted the number of banks in each community; hence it was logical and consistent for the law to provide that this limited bank accommodation should not be monopolized by any small group of persons.

Now, however, all limitations upon the total volume of national-bank currency have been removed, and to all intents and purposes the system has become one of free banking, open to citizens of the entire country, to any extent to which they may desire to avail themselves of its privileges; hence there does not appear to be any longer the same reason that there was formerly for the law to enforce a general distribution through the community of the amount of accommodation at the disposal of a national bank.

As a matter of fact, with the growth and extension of the system, banks, especially in the large cities, have had their business very much specialized, and such banks cannot continue to exist or remain in the system if they should now be held to a strict conformity with section 5200.

The specialization of the business of the banks means, of course, their becoming identified with special lines in trade, manufacturing, farming, &c., and as in all such industries there has long been a tendency toward concentration in the hands of a comparatively small number of large houses, it follows that banks so situated must lend largely to particular firms or else lose their most important customers. Thus business necessity on the one hand, and the limitations of the law on the other, have produced, in many cases, habitual disregard of the law, and in other cases evasions of the law, all of which must be either ignored or tolerated by the Comptroller of the Currency, because the only penalty

* The limitation in the original act of 1863 was different and complicated.

now provided is forfeiture of the corporate existence of the offending bank.

While these reasons exist for modifying the law, at the same time it is of course important that some limitation should be imposed upon the amount that any bank should hold in the paper of any person, company, corporation, or firm, and that the limit should be such as can be effectively enforced by the Comptroller.

To this end I respectfully suggest the following:

(1) That the limit of 10 per cent. of the capital, in loans to one party, be extended so as to be computed upon capital and whatever surplus may be held in excess of the legal requirement of 20 per cent. of capital.

(2) That this limit may be exceeded only in cases where a bank holds security of undoubted value, and which is not in any way dependent for its ready convertibility upon the borrower.

(3) That the penalty for violation of this restriction be such, in the discretion of Congress, as shall appear to be proportionate to the nature of the offense and such as may be readily enforced by the Comptroller of the Currency.

Eighth. That section 5209 be so amended as to extend the penalties therein specified for making false entries, reports, or statements, so as to make them apply to bank examiners or other persons in the employment of the Comptroller of the Currency, and also to all such acts done with intent to deceive the Comptroller of the Currency or any person in his employment.

The protection of banks and of those whose interests are in the keeping of the banks against fraud on the part of the bank officers invites the attention of Congress, both in the interest of general order and for the improvement of the banking system. In order that legislation deemed advisable may be framed, with reference to past experience, I have given in the Appendix to this report extracts from records in this office showing the causes of national-bank failures in all cases in respect to which such information is accessible.

Ninth. That section 5219 be so amended as to enable the national banks to obtain that practical protection against unequal State taxation which it was manifestly the intention of Congress to secure to them in this section.

Tenth. That section 5240 be so amended as to apportion the compensation for examination of national banks according to the aggregate investments in each case, rather than according to the amount of capital, and that provision be made for more frequent examinations than are now possible by adding to the amount paid by the banks a suitable amount to be paid out of the Treasury in order that supervising examiners may be employed.

Eleventh. That a law be enacted to the effect that any oath required of the officers or directors of a national banking association may be taken before any commissioner of a circuit court, or before a notary public having an official seal, or before any other officer using a seal, where such notary or officer is qualified by the law of any State or Territory to administer oaths.

There is a practical necessity for such an enactment; for upon an examination of the statutes, in the light of the decision of the Supreme Court in the case of the *United States v. Curtis* (107 U. S., 671), it appears that no provision has been made for giving legal effect to the oaths required of bank officers and directors, except in the one case to which the act of February 26, 1881, specially applies.

This act evidently aimed to supply an omission in the law, but inas-

much as it applies to only one case out of several, other omissions seem by implication to have the sanction of Congress, which I am sure they have not, because, as the law now stands, a director who swears falsely as to his qualifications for such position, or a president or cashier who makes oath to a false statement of the dividends and earnings of his association, cannot be convicted of perjury.

Twelfth. That, in the absence or disability of the cashier, all certificates required by law to be made by him may be made, with the authority of the board of directors, by the assistant cashier, if the bank has such an officer, and if it has no such officer, then by some one appointed by the directors to perform the duties of the cashier; provided, however, that no assistant or acting cashier shall be authorized to sign circulating notes. The want of such a provision in the banking law is the cause of considerable inconvenience and annoyance to the banks.

Thirteenth. I renew the recommendation of my predecessor for further legislation to ascertain and protect the rights of shareholders desiring to withdraw from national banks which are extending their corporate existence.

* * * * *

CIRCULATING NOTES.

Upon the security of its bonds deposited with the Treasurer, each bank is entitled to receive, and the Comptroller of the Currency is by law required to issue to it, circulating notes to the amount of 90 per cent. of the market value, and not more than 90 per cent. of the par value of the bonds. Any bank may deposit more than the minimum of bonds, and may take out circulating notes for 90 per cent. of its deposit, provided its entire outstanding circulation against bonds does not exceed 90 per cent. of its capital stock actually paid in. The circulating notes when issued by the Comptroller are in sheets, and are not valid until signed by the bank officers designated by the statute.

Under the present law the minimum deposit of bonds required to be made by the 2,852 national banks in operation in the United States on October 7, 1886, in order to continue as national banking associations, would be but \$84,365,312.

Tables in the Appendix* show by States and geographical divisions the national banks in operation on October 7, 1886, separated into two classes, namely, banks of which the capital does not exceed, and banks of which the capital exceeds, \$150,000. The first class contains 2,001 banks, with an aggregate capital of \$167,261,245; the second 851, with an aggregate capital of \$380,979,485. The minimum of bonds required to be kept on deposit by the entire body of banks in the first class is \$41,815,312; the minimum for the 851 banks of the second class is \$42,550,000. If all banks held only the minimum of bonds, the total national-bank circulation would be \$75,928,781, while the possible maximum of circulation, being 90 per cent. of the aggregate of the national-bank capital, would be \$493,416,657. The actual circulation on October 7, 1886, was \$303,176,776, inclusive of \$71,953,145 still outstanding, but which is no longer represented by bonds, but by that amount of lawful money deposited with the Treasurer of the United States to redeem it. The \$231,223,631 of circulation for which the banks are responsible is composed of \$86,517,585 secured by the bonds deposited by the 2,001 banks having \$150,000 capital and less, and \$144,706,046 secured by the bonds belonging to the 851 banks of which the capital

* This Appendix, which is omitted for want of space, will be found in the bound volume of the Comptroller's report.

exceeds \$150,000. The first class of banks have therefore \$48,883,805 more than their minimum, and \$64,017,536 less than their possible maximum circulation, while the larger banks have \$106,411,046 more than their minimum, and \$198,175,491 less than their maximum.

The following table shows the number of banks organized from July 1, 1882, to July 1, 1886, their capital stock, amount of bonds deposited, and the circulation issued thereon :

Year.	Number of banks.	Capital.	Minimum bonds required.	Bonds actually deposited.	Percentage of excess.	Circulation issued.
					<i>Per cent.</i>	
July 1, 1882, to July 1, 1883 ..	251	\$28, 552, 300	\$5, 155, 500	\$7, 116, 400	28	\$6, 404, 700
July 1, 1883, to July 1, 1884 ..	218	19, 944, 000	4, 016, 000	4, 676, 100	14	4, 208, 490
July 1, 1884, to July 1, 1885 ..	142	15, 205, 000	3, 061, 250	3, 332, 800	8	2, 699, 820
July 1, 1885, to July 1, 1886 ..	163	17, 553, 000	3, 404, 500	3, 715, 500	8	3, 842, 950

From the foregoing table it appears that 774 banks have been organized between the dates given, with a capital of \$79,254,300; that they have deposited \$18,840,800 bonds, upon which circulation to the amount of \$16,956,720 has been issued. The minimum deposit of bonds as required by law for such banks is \$15,637,250, and it will be observed that while the actual deposit has in the aggregate exceeded the minimum absolutely required, yet this excess steadily decreased during the first three years covered by the table, and during the years ending July 1, 1885, and July 1, 1886, the percentage of excess remained the same, namely, 8 per cent. Of the 163 national banks organized during the past fiscal year, 96 have a capital of \$50,000 each, amounting to \$4,800,000; 44 have a capital of over \$50,000 and not exceeding \$150,000, amounting to \$4,218,000; and 23 have a capital of \$8,535,000. The latter class of banks deposited only \$100,000 of bonds in excess of the minimum required by law.

Tables have been prepared, and will be found in the Appendix, showing for the national banks in each State, Territory, and reserve city the minimum amount of bonds required by law, the bonds actually held, and the circulation issued thereon and outstanding October 7, 1886; also all other information deemed useful, as to circulation.

Banks are privileged to change their deposited bonds from time to time, to increase and to reduce the amount, within limits, and are required to inspect once a year, the bonds held for them in trust by the Treasurer. The Comptroller of the Currency is the agent and medium of all such changes, his indorsement on the bonds establishes their ownership and alone validates their transfer. Section 5163 of the Revised Statutes requires him to record every act of deposit, transfer, and withdrawal, and to keep a set of books for the purpose.

INTEREST-BEARING FUNDED DEBT OF THE UNITED STATES, AND THE AMOUNT HELD BY NATIONAL BANKS.

The connection between the banks and the distribution of the funded debt of the United States renders the following statement appropriate.

The public debt, at its maximum on August 31, 1865, amounted to \$2,844,649,626; of which, obligations not bearing interest amounted to \$461,616,311, leaving \$2,383,033,315, carrying an average rate of interest of about 6.33 per cent. On November 1, 1886, the interest-bearing debt amounted to \$1,153,443,112.

ISSUES.

The total issues of incomplete currency during the year are shown by the vault account, as follows:

National-bank currency in vaults October 31, 1885.....	\$78,601,550
Amount received from Bureau of Engraving and Printing during the year ending October 31, 1886	46,872,850
Total	125,474,400
Amount issued to banks during the year.....	\$62,026,940
Amount canceled during the year, not having been issued.	960,800
	<hr/> 62,987,740
Balance in vaults	\$62,486,660

The duties devolving upon the clerical force in the Division of Issue of this office are of great responsibility, requiring absolute accuracy and promptness on the part of those to whom these duties are assigned. The records of receipts and issues are balanced daily with the vault accounts, and the work of each day completed before that of another day is begun. During the past year 42,478 packages of currency were forwarded to banks by express, the same number of receipts prepared for signature and return by the banks, and a large amount of correspondence was conducted.

REDEMPTION.

Prior to the act of June 20, 1874, national banks were required to redeem their circulating notes, either at their own counters or through redemption agents in certain designated cities.

That act abolished redemption agencies, made the circulation redeemable only at the banks of issue and at the Treasury in Washington, and required the banks to keep on deposit at the Treasury a redemption fund of 5 per cent. upon outstanding circulation.

Under the operation of this law the redemption agency at the Treasury has received, up to November 1, 1886, \$1,711,850,786 of national-bank currency.

During the past year the receipts amounted to \$117,485,048, of which amount \$44,755,800, or 33 per cent., was received from the banks in the city of New York, and \$25,042,300, or 21 per cent., from banks in the city of Boston. The amount received from Philadelphia was \$7,232,500, from Chicago \$6,256,600, from Cincinnati \$1,886,400, from Saint Louis \$3,533,300, from Baltimore \$3,662,100, from Providence \$1,309,500, from New Orleans \$1,193,400, and from Pittsburgh \$491,500.

The amount of national-bank notes fit for circulation returned by the redemption agency to the banks of issue during the year was \$41,180,010. The amount received by the Comptroller of the Currency for destruction, from the agency and from the banks direct, was \$47,154,430, and on account of reducing, insolvent, and liquidating banks, \$28,865,577.

The act of June 20, 1874, provided that any national banking association might withdraw its circulating notes upon the deposit of lawful money with the Treasurer of the United States in sums of not less than \$9,000. Under this act, and on account of liquidating and insolvent banks, and under the act of July 12, 1882, which provides for a deposit of lawful money to retire the old circulation of national banks whose corporate existence has been extended, \$310,495,460 of lawful money has been deposited with the Treasurer. This includes \$2,663,720 for redemption of the notes of national gold banks, and \$52,253,177 for the

redemption of national-bank notes under section 6 of the act of July 12, 1882.

During the year ending November 1, 1886, lawful money to the amount of \$71,148,392 was deposited with the Treasurer to retire circulation, of which \$2,201,310 was deposited by banks in liquidation, \$30,819,726 by banks reducing circulation under the act of June 20, 1874, and \$38,127,357 by banks retiring old circulation under the act of July 12, 1882. The amount previously deposited under the acts of June 20, 1874, and July 12, 1882, was \$191,516,297; by banks in liquidation, \$62,075,581; making a total of \$324,740,270. Deducting from the total the amount of circulating notes redeemed and destroyed without reissue, which was \$242,921,036, there remained in the hands of the Treasurer on November 1, 1886, \$81,819,233 of lawful money for the redemption and retirement of national-bank circulation, including \$296,060 for the redemption of the circulating notes of national gold banks.

Prior to June 20, 1874, there were redeemed and destroyed \$10,431,135, and since that date \$232,489,901 of bank notes have been redeemed, destroyed, and retired. This latter amount includes \$2,367,651 of the notes of national gold banks and \$15,414,458 of the notes of national banks whose corporate existence has been extended under the act of July 12, 1882.

There are at present no national gold banks in existence. Of those which had been organized three went into voluntary liquidation, and the others became currency banks, under the provisions of the act approved February 14, 1880.

The following table exhibits the amount of national-bank notes received monthly for redemption by the Comptroller of the Currency during the year ending October 31, 1886, and the amount received during the same period at the redemption agency of the Treasury, together with the total amount received since the passage of the act of June 20, 1874: *

Months.	Received by the Comptroller of the Currency—					Received at United States Treasury redemption agency.
	From national banks in connection with reduction of circulation and replacement with new notes.	From the redemption agency—			Total.	
		For replacement with new notes.	For reduction of circulation under act June 20, 1874.*	Insolvent and liquidating national banks.		
1885.						
November	\$235, 010	\$2, 774, 710	\$681, 700	\$1, 924, 000	\$5, 806, 140	\$7, 772, 370
December	15, 745	4, 522, 680	923, 310	1, 138, 451	6, 600, 186	11, 237, 901
1886.						
January	35, 600	4, 676, 200	944, 610	1, 258, 040	7, 113, 910	17, 485, 200
February	136, 790	5, 578, 220	1, 217, 510	1, 514, 980	8, 447, 500	22, 206, 474
March	15	5, 414, 470	1, 388, 140	1, 062, 217	8, 455, 343	10, 825, 508
April	105	3, 182, 570	820, 300	1, 147, 077	5, 250, 112	8, 420, 691
May	1, 050	4, 264, 723	1, 287, 925	1, 531, 631	7, 084, 331	11, 400, 230
June	1, 020	4, 771, 400	1, 557, 330	1, 712, 019	8, 042, 769	11, 140, 328
July	31, 300	3, 953, 700	1, 205, 130	1, 407, 565	6, 697, 755	9, 201, 671
August	40	2, 675, 300	961, 300	1, 124, 935	4, 892, 075	8, 293, 341
September	1, 120	2, 404, 740	823, 820	1, 010, 063	4, 243, 768	5, 433, 047
October	99, 000	2, 088, 360	925, 533	474, 054	3, 687, 516	8, 928, 305
Total	546, 215	40, 608, 215	12, 940, 850	15, 018, 727	78, 620, 007	117, 485, 049
Received from June 20, 1874, to October 31, 1885.	15, 519, 500	603, 664, 885	150, 918, 301	42, 383, 508	970, 486, 295	1, 504, 365, 732
Grand total	16, 065, 805	740, 273, 100	171, 865, 151	58, 221, 936	980, 426, 293	1, 711, 850, 781

* Notes of gold banks are not included in the table.

The following table exhibits the amount of national-bank notes received at this office and destroyed yearly since the establishment of the system :

Prior to November 1, 1865	\$175,490
During year ended October 31—	
1866	1,050,383
1867	3,401,423
1868	4,602,825
1869	8,803,729
1870	14,803,849
1871	24,344,047
1872	30,211,720
1873	36,473,171
1874	49,809,741
1875	131,007,896
1876	98,872,716
1877	79,918,963
1878	87,381,240
1879	41,101,830
1880	26,539,650
1881	54,941,130
1882	74,917,611
1883	82,913,706
1884	93,178,418
1885	91,048,723
1886	50,089,810
Additional amount of insolvent and liquidating national banks	68,778,364
Total	1,146,148,153

Notes of gold banks are not included in the above table.

There was in the vault of the Redemption Division of this office, awaiting destruction, at the close of business, October 31, 1885	\$173,936
Received during the year ending October 31, 1886	76,110,047
Total	76,283,977
Withdrawn and destroyed during the year	75,906,737
Balance in vault November 1, 1886	\$387,240

Received from the Treasurer of the United States \$75,563,832, in 88,717 packages; received from banks direct \$546,215, in 26 packages.

The work in this division, in handling this vast amount of mutilated notes, requires great accuracy, skill and precision.

In connection with this subject I respectfully present a series of tables, for which I am indebted to Mr. E. B. Elliott, Government actuary, whose widely-extended reputation is a guarantee for their accuracy. They are intended to show, as fully as the data permit, how long, on the average, the national-bank notes of the several denominations remain out.

REPORTS.

The law imposes upon the Comptroller of the Currency the duty of exercising a supervision over the national banks, and to that end requires him to exact reports from them as to their condition on at least five days in each year, and reports of the dividends and earnings of each bank as often as it declares dividends, and in all cases at least every six months.

In addition, the Comptroller may call for special reports from any or from all of the banks as often as he thinks proper, and may from time to time cause examinations to be made into their books, cash, securities, and general condition.

The proper performance of the duty of supervision is essential to the maintenance of the high character and credit to which the national banks have attained, as well as to the protection of their depositors and stockholders against fraud and mismanagement.

The multiplication of banks, and the wide area over which the system now extends, renders the discharge of these duties more and more difficult every year, and requires the maintenance of a large force of expert clerks in the office of the Comptroller.

The duties of national-bank examiners have also become more exacting and more difficult in consequence of the expansion of the business of these banks.

These statements will doubtless be accepted when it is considered that in the past five years the number of banks has increased from 2,132 to 2,852, reporting October 7, 1886, while the aggregate of their loans and discounts has risen from \$1,173,800,000 to \$1,443,665,000.

It is of the highest importance to the banks themselves, as well as to the public, that the examiners should be expert, vigilant, and trustworthy, and that the examinations should be frequent and unexpected.

While the examiners now employed are generally competent, and many of them are excellent, yet in some cases the territory to be covered is too large, and the pay too small, to secure the best men for the work.

I have elsewhere made some recommendations on this subject.

During the past year 14,010 reports of condition, about 6,000 reports of dividends and earnings, and 2,930 reports from examiners have been received at the office of the Comptroller of the Currency, and fully 6,000 letters and circulars have been sent out in connection with them. The reports received are all carefully examined, compared with one another, and abstracts are made from them. The work in this division of the office is continuous and exacting.

From these various reports, after examination and verification, the subjoined tables have been compiled, and other tables compiled from the same sources will be found in the Appendix showing the condition of the reserve of national banks, their loans and discounts, abstract of reports of dividends and earnings, ratios to capital and to capital and surplus, and other valuable information as to the condition of the national banks on the date of the last report.

A large table on folded sheet, appended hereto, exhibits for October 7, 1886, in aggregate every detail embraced in the tabulated reports required of the banks. Similar tables are made up for the information of the Comptroller from the reports gathered from all banks five times each year. The amounts are given separately for each State, reserve city, and Territory.

DIAGRAM.

The diagram accompanying this report exhibits in a very striking manner the main features of the national banking system, and how each has varied during the twenty-one years since the peace of the country has been re-established.

On the 1st of January, 1866, there were 1,582 national banks; on the 7th of October, 1886, there were 2,852—a net increase in number alone of 1,270.

The following table groups in a compendious form the most important facts shown in the diagram:

	January 1, 1866.	October 7, 1886.	Highest point touched.		Lowest point touched.	
			Amount.	Date.	Amount.	Date.
Capital	\$403, 000, 000	\$543, 000, 000	\$543, 000, 000	Oct. 7, 1886	\$403, 000, 000	Jan. 1, 1866
Capital, surplus, and undivided profits	475, 000, 000	772, 000, 000	772, 000, 000	Oct. 7, 1886	475, 000, 000	Jan. 1, 1866
Circulation	213, 000, 000	228, 000, 000	841, 000, 000	Dec. 26, 1873	213, 000, 000	Jan. 1, 1866
Total investments in United States bonds..	440, 000, 000	291, 000, 000	712, 000, 000	Apr. 4, 1879	291, 000, 000	Oct. 7, 1886
Deposits.....	522, 000, 000	1, 173, 000, 000	1, 173, 000, 000	Oct. 7, 1886	501, 000, 000	Oct. 8, 1870
Loans and discounts...	500, 000, 000	1, 443, 000, 000	1, 443, 000, 000	Oct. 7, 1886	500, 000, 000	Jan. 1, 1866
Cash:						
National-bank notes .	20, 000, 000	23, 000, 000	28, 000, 000	Dec. 31, 1883	11, 000, 000	Oct. 7, 1867
Legal-tender notes...	187, 000, 000	63, 000, 000	205, 000, 000	Oct. 1, 1866	50, 000, 000	Mar. 11, 1883
Specie	10, 000, 000	156, 000, 000	177, 000, 000	July 1, 1885	8, 000, 000	Oct. 1, 1875

An examination of this table shows that the aggregate capital, surplus, undivided profits, circulation, and deposits have increased from \$1,210,000,000 in January, 1866, to \$2,173,000,000 in October, 1886, which is less than double, while the loans and discounts have gone up from \$500,000,000 to \$1,443,000,000, which is nearly treble, showing how much more widely the banks are now identified with the general business of the country than they were twenty-one years ago.

The investments in bonds have taken an opposite course. Amounting to \$440,000,000 in 1866, increasing to \$712,000,000 in April, 1879, they had subsided by 7th October last to \$291,000,000, but little more than half what they were in 1866, and scarcely over a third of what they momentarily amounted to in 1879.

The specie, which at the beginning of the period was but \$19,000,000, had got down in October, 1875, to \$8,000,000, is now \$156,000,000, and in July, 1885, was \$177,000,000.

It is interesting to see how these changes appear when reduced to percentages.

The capital, surplus, undivided profits, circulation, and deposits constitute together the fund upon which a bank does its business.

Loans and discounts, United States bonds, specie, &c., are different forms in which this fund is invested. Taking the fund at \$1,210,000,000 in 1866 and at \$2,173,000,000 in 1886, these investments represent the following proportions of those amounts, viz:

	1866.	1886.
Loans and discounts	41.32	66.40
United States bonds	36.36	13.89
Specie	1.57	7.18
Total	79.25	86.97

Another striking fact is that in 1866 the circulation was \$213,000,000 and in 1886 it is only \$228,000,000. At the former period, therefore, the circulation was nearly 45 per cent. of the capital, surplus, and undivided profits, while now it is only about 29 per cent.

LOANS.

The following table gives a classification of the loans of the national banks in the city of New York, in the three cities Boston, Philadelphia, and Baltimore, in the other reserve cities, and in the rest of the country, at nearly the same dates, in each of the last three years:

SEPTEMBER 30, 1884.

Classification.	New York.	Three cities.	Other cities.	Country.	Total.
	44 banks.	104 banks.	99 banks.	2,417 banks.	2,664 banks.
On U. S. bonds on demand	\$2,933,785	\$644,017	\$268,396	\$970,691	\$4,816,889
On other stocks, bonds, &c., on demand	69,805,215	25,763,605	18,573,905	34,050,829	148,193,554
On single-name paper without other security	12,559,441	22,458,370	16,239,550	83,816,871	135,074,232
All other loans	120,054,836	150,372,086	107,543,129	574,016,071	951,986,122
Total	205,353,277	199,238,078	142,621,980	692,854,462	1,240,070,797

OCTOBER 1, 1883.

Classification.	44 banks.	105 banks.	98 banks.	2,467 banks.	2,714 banks.
On U. S. bonds on demand.....	\$2,286,124	\$189,195	\$385,154	\$504,124	\$4,563,697
On other stocks, bonds, &c., on demand	80,067,285	33,157,319	35,621,692	84,036,931	172,392,697
On single-name paper without other security.....	25,331,829	34,806,254	18,489,223	92,873,780	171,492,687
All other loans.....	127,516,389	154,270,593	108,848,850	567,057,152	951,796,608
Total	235,201,637	218,424,271	151,435,468	694,471,987	1,301,155,392

OCTOBER 7, 1886.

Classification.	45 banks.	111 banks.	104 banks.	2,390 banks.	2,652 banks.
On U. S. bonds on demand...	\$2,002,550	\$262,355	\$489,000	\$563,717	\$3,314,721
On other stocks, bonds, &c., on demand ..	91,638,791	35,741,645	28,029,229	41,008,612	196,415,477
On single-name paper, without other security.....	24,046,008	37,315,993	25,488,998	110,677,534	198,128,583
All other loans	135,447,027	156,281,282	127,251,447	626,842,753	1,045,809,509
Total	253,134,376	229,581,275	181,259,773	779,092,616	1,443,668,390

In the table below is given a full classification of the loans in New York City alone for the last five years:

Loans and discount.	October 3, 1862.	October 2, 1863.	September 30, 1864.	October 1, 1865.	October 7, 1866.
	50 banks.	48 banks.	44 banks.	44 banks.	45 banks.
On indorsed paper	\$116,697,651	\$121,644,201	\$116,610,662	\$114,612,775	\$121,361,380
On single-named paper.....	21,203,578	19,147,651	52,559,443	25,381,820	24,646,608
On U. S. bonds on demand.	1,707,687	2,093,927	2,933,785	3,286,124	3,003,850
On other stocks, &c., on demand	89,532,762	94,321,005	69,805,215	80,687,265	91,638,791
On real-estate security	304,732	184,643	163,397	215,366	311,432
All other loans	7,600,487	7,717,265	3,681,375	13,289,229	13,654,218
Total.....	239,041,892	245,108,332	205,353,277	236,823,598	253,732,876

The following table exhibits, in the order of capital, the twenty-five States (exclusive of reserve cities) having the largest amount of national-bank capital, together with the amount of circulation, loans and discounts, and individual deposits of the banks in each on October 7, 1886:

States.	Capital.	Circulation.	Loans and discounts.	Individual deposits.
Massachusetts	\$45,190,500	\$30,679,190	\$88,361,209 07	\$54,429,904 42
New York	34,854,760	21,542,496	92,520,434 69	64,901,702 64
Pennsylvania.....	33,625,340	19,390,593	72,551,170 04	67,557,897 11
Connecticut	24,671,820	18,654,874	42,702,564 81	26,847,208 25
Ohio	22,143,850	11,328,694	44,880,167 42	37,693,620 87
Rhode Island	20,340,050	9,192,726	33,085,194 56	13,748,576 25
Illinois	13,936,500	5,200,630	32,217,830 12	29,525,240 04
Indiana.....	12,344,580	5,977,930	24,835,384 45	28,805,437 14
New Jersey	12,298,350	7,258,272	35,535,803 40	35,730,912 23
Minnesota	12,290,660	1,707,701	31,751,553 84	22,089,907 36
Michigan	10,695,300	8,294,955	25,746,522 86	29,401,682 78
Maine	10,360,000	6,833,473	17,843,615 84	10,219,608 42
Iowa	10,295,000	8,421,689	22,139,229 88	17,613,890 18
Kentucky	9,758,000	4,374,110	16,068,412 47	9,133,451 20
Vermont	7,691,000	4,589,013	11,773,580 48	5,915,120 70
Texas	7,643,000	1,737,386	15,485,910 33	11,647,169 22
Nebraska	7,183,800	1,602,088	18,899,900 48	14,214,337 61
Kansas	6,732,100	1,688,816	14,442,130 51	12,591,124 82
New Hampshire.....	6,155,000	4,173,229	9,034,263 78	6,705,741 18
Missouri	5,831,000	1,865,623	12,438,909 69	9,664,181 69
Tennessee	5,417,500	1,328,045	13,473,324 07	9,234,256 61
Wisconsin	2,965,000	1,391,618	11,188,201 90	11,011,632 59
Virginia	3,731,500	1,913,410	10,500,420 85	9,531,677 93
Dakota	3,015,500	779,190	9,104,519 48	4,585,637 98
California.....	2,885,000	834,720	8,602,672 45	9,251,635 10

The following table affords an interesting comparison of the exchanges in the clearing-houses of the world:

COMPARATIVE STATEMENT of settlements of CLEARING-HOUSES of the WORLD.
[Foreign money reduced to dollars.]

State or country.	Location.	Date.	Amount.
New York.....	New York City (63 banks)	Oct. 1, 1886	\$38, 374, 682, 216
Massachusetts.....	Boston (52 banks)	Oct. 1, 1886	4, 008, 565, 266
Pennsylvania.....	Philadelphia (37 banks)	Oct. 1, 1886	2, 785, 875, 450
Illinois.....	Chicago (20 banks)	Oct. 1, 1886	2, 500, 309, 272
	Other cities (27) of the United States (335 banks)	Oct. 1, 1886	5, 482, 151, 567
	Total United States (507 banks).....		48, 211, 643, 771
England &.....	London.....	Jan. 1, 1886	20, 816, 871, 486
	London (country clearings)	Jan. 1, 1886	2, 072, 916, 000
	Manchester	Jan. 1, 1886	543, 975, 979
	Newcastle-on-Tyne	Jan. 1, 1886	155, 843, 382
	Total England.....		29, 589, 006, 847
France &.....	Paris.....	Jan. 1, 1886	766, 747, 832
Austria &.....	Vienna.....	Jan. 1, 1886	1, 771, 138, 171
Germany &.....	Hamburg	Jan. 1, 1886	1, 249, 070, 196
	Berlin.....	Jan. 1, 1886	728, 374, 962
	Frankfort	Jan. 1, 1886	481, 658, 688
	Cologne	Jan. 1, 1886	133, 711, 018
	Bremen	Jan. 1, 1886	165, 311, 766
	Leipzig.....	Jan. 1, 1886	83, 122, 666
	Stuttgart.....	Jan. 1, 1886	72, 212, 128
	Breslau	Jan. 1, 1886	63, 730, 713
	Dresden.....	Jan. 1, 1886	20, 765, 904
	Total Germany.....		2, 987, 957, 981
Italy &.....	Milan	Jan. 1, 1886	70, 305, 481
	Six other Italian clearing-houses.....	Jan. 1, 1886	85, 461, 306
	Total Italy.....		114, 866, 787
Australia &.....	Melbourne	Jan. 1, 1886	813, 057, 891

& S at \$4.26, C. b Franc at 19.3 cents. c Florin at 39.3 cents. d Mark at 23.8 cents. e Lira at 19.3 cents.

TAXES UPON NATIONAL BANKS.

National banks are subject to a semi-annual duty of one-half of 1 per cent. upon the average amount of their notes in circulation during the preceding six months. They are also required, by the act of June 20, 1874, to pay the cost of the redemption of their notes at the office of the Treasurer of the United States at Washington, and the cost of the plates from which their notes are printed. Banks extending their corporate existence have to pay for new plates. Previously to the act of June 20, 1874, the expense of the plates had been paid out of the tax on the banks, which at that time attached to capital and deposits as well as to circulation.

The banks are further required to pay the fees of the examiners employed to ascertain their condition, under section 5240, Revised Statutes of the United States.

The taxes and assessments collected during the past year were as follows :

Semi-annual duty on circulation.....	\$2, 592, 021 33
Cost of redemption of notes by United States Treasurer.....	168, 243 35
Assessments for cost of plates, new banks.....	14, 810 00
Assessments for cost of plates, extended banks.....	24, 825 00
Assessments for examiners' fees, sec. 5240, R. S	107, 272 83
Total	2, 907, 172 51

It has not been customary heretofore to include assessments with taxes, but it seems proper to do so.

The following tables are brought forward from previous reports. For the sake of uniformity the only addition made is the semi-annual duty on circulation during the past year:

Years.	On circulation.	On deposits.	On capital.	Total.
1864.....	\$53,193 32	\$95,011 87	\$18,432 07	\$166,637 26
1865.....	737,247 50	1,087,530 86	133,751 15	1,958,529 51
1866.....	2,106,785 30	2,633,102 77	406,847 74	5,146,735 81
1867.....	2,808,636 78	2,650,180 09	321,881 36	5,780,698 23
1868.....	2,918,343 07	2,504,143 44	308,781 67	5,731,268 18
1869.....	2,957,410 73	2,614,553 58	312,918 60	5,884,882 91
1870.....	2,949,744 13	2,614,767 61	375,963 26	5,940,474 00
1871.....	2,087,021 69	2,402,840 55	385,293 13	4,875,155 37
1872.....	3,193,570 03	3,120,984 87	389,356 27	6,703,911 17
1873.....	3,353,186 13	3,190,569 29	454,801 51	7,004,556 93
1874.....	3,404,483 11	3,209,967 72	489,048 02	7,093,498 85
1875.....	3,283,450 89	3,514,265 39	507,417 76	7,305,134 04
1876.....	3,091,795 76	3,505,129 84	632,296 16	7,229,221 76
1877.....	3,000,857 53	3,451,965 36	660,784 90	7,113,607 79
1878.....	2,948,047 68	3,273,111 74	580,296 82	6,801,456 24
1879.....	3,009,847 16	3,309,068 90	401,020 61	6,720,936 67
1880.....	3,153,635 63	4,058,710 61	879,424 19	8,091,770 43
1881.....	3,121,374 33	4,040,945 12	431,233 16	7,593,552 61
1882.....	3,190,981 98	5,521,027 47	437,774 90	9,150,784 35
1883.....	3,182,006 73	*2,773,790 46	*368,978 43	6,324,775 62
1884.....	3,024,668 24	.....	.....	3,024,668 24
1885.....	2,794,584 01	.....	.....	2,794,584 01
1886.....	2,502,021 38	.....	.....	2,502,021 38
Aggregate.....	67,790,798 55	60,940,067 16	7,865,867 74	136,596,733 45

* Six months to June 1, 1883.

The following table exhibits the taxes upon the circulation, deposits, and capital of banks, other than national, collected by the Commissioner of Internal Revenue, from 1864 to November 1, 1882, the date upon which the taxation of capital and deposits ceased:

Years.	On circulation.	On deposits.	On capital.	TOTAL.
1864.....	\$2,056,906 30	\$780,723 62	.....	\$3,837,630 92
1865.....	1,903,861 84	2,043,841 06	\$903,367 06	4,851,070 96
1866.....	990,278 11	2,099,635 83	274,074 11	3,364,088 05
1867.....	214,296 75	1,355,895 68	475,967 73	2,046,160 16
1868.....	28,669 88	1,488,512 77	390,562 00	1,847,744 65
1869.....	16,565 05	1,734,417 62	445,071 49	2,196,054 16
1870.....	15,419 94	2,177,576 46	827,087 21	3,120,083 61
1871.....	22,781 92	2,702,196 84	919,262 77	3,644,241 53
1872.....	8,019 62	3,643,251 71	976,057 61	4,627,329 94
1873.....	24,778 62	3,009,302 70	736,060 05	3,771,031 37
1874.....	16,738 26	2,453,544 26	916,878 13	3,387,160 65
1875.....	22,746 27	2,972,200 37	1,102,241 59	4,097,288 23
1876.....	17,947 67	2,909,530 75	980,219 61	3,907,707 03
1877.....	5,430 16	2,898,637 03	937,661 24	3,832,728 43
1878.....	1,118 72	2,503,687 20	807,225 84	3,312,631 76
1879.....	13,003 29	2,354,811 74	630,068 60	3,198,883 63
1880.....	28,778 37	2,510,775 43	811,436 48	3,350,990 28
1881.....	4,295 08	2,916,006 64	811,006 35	3,731,307 07
1882.....	4,285 77	4,086,102 45	1,158,070 25	5,253,458 47
1882*.....	.....	1,903,026 03	480,033 53	2,383,059 56
Aggregate.....	5,467,608 82	48,802,237 39	14,986,143 44	69,255,989 65

* Six months to November 30, 1882.

STATE TAXATION OF NATIONAL BANKS.

There has been for some years more or less friction arising out of the mode of assessing and collecting taxes on national-bank shares in some of the States.

The subject has been frequently and fully treated by my predecessors, and therefore in renewing it I need say only that as Congress obviously intended to protect the national banks from discriminative taxation, it would seem proper that force be given to this purpose by its more definite expression in the law.

In consequence of different constructions placed by taxing officers upon the existing statute, litigation of a costly and more or less irritating character has arisen in States which together contain nearly one-half of all the national-bank capital in the Union.

CONCLUSION.

In selecting the information presented in this report, I have endeavored to exhibit the practical working of the present national currency and bank laws, and I have also had in view the importance of supplying material for a full understanding of the relations between the national banks and the general business of the country, in order to explain the widely prevalent desire among business men for some legislation directed to the establishment of these banks upon a more permanent basis.

The national banking system had its origin during the war, and it will always stand splendid in history as an example of financial skill successful under very difficult circumstances.

The problem in 1863 was how to bring the banking capital of the country to the support of the Treasury, and it cannot be doubted that the banks then had it in their power to exact from the Government concessions far more valuable than those granted them. Even these moderate concessions have long since lost all the elements of monopoly, and the act of June 20, 1874, actually took away \$55,000,000 of circulation, partly from banks organized during the war, in order to give the privilege of issuing that sum to banks in States that were cut off by the war from access to the national banking system; a measure entitled to honorable consideration, because at that time those States were without sufficient political influence to exact a share in this valuable privilege, and the then existing banks were strong enough to have made a successful resistance if they had been selfishly inclined.

The last vestige of monopoly was swept away by the act of January 14, 1875, which created a free banking system throughout the United States, and, supplemented by the act of July 12, 1882, brought its benefits within reach of even small communities.

Under the sanction of these laws the national banks have become numerous, widely distributed, and intimately identified with the varied industries by which our entire population literally obtain their daily bread, but during the same time the rapid reduction of the funded debt of the Government has been introducing into the very basis of the system an element of instability which now hampers its extension, impairs its usefulness, and even threatens its continued existence, while there are still great areas of our country in which the natural resources are awaiting development by just such means as these banks might be made to supply.

The present financial prospects of the country induce the expectation that the funded debt will be paid off as fast as the bonds mature, and, in consequence, a question has arisen as to what changes should be

made in the national-bank system in order that it shall not suffer deterioration or destruction upon the withdrawal of the support upon which it is based by the present laws, which require every bank before beginning business to deposit a certain amount in United States bonds.

The payment of the 3 per cent. bonds, the maturity in 1891 of the 4½ per cent. bonds, amounting to \$250,000,000, and in 1907 of the 4 per cent. bonds, amounting to nearly \$738,000,000, have combined to produce a prospective scarcity in the securities available to the banks as a basis for their corporate existence, and this is reflected in the advance of these bonds to a premium so high that every day their enforced purchase becomes more and more onerous.

Banks now holding only 3-per cent. bonds, and newly organized national banking associations, are forced into the market as purchasers of the 4 per cent. or the 4½ per cent. bonds, and this constant demand, in connection with the prospective scarcity already referred to, sustains and tends still further to elevate the premium on these bonds.

As the time approaches for the payment of the 4½-per cent. bonds, it is reasonable to expect a still greater demand for the 4 percents, and it is a question of serious importance whether the banks can afford to hold or to buy 4 per cent. bonds after 1891.

In the present age all business men try to anticipate future conditions and to provide well in advance against foreseen contingencies; hence it is to be expected that the banks will not wait until the approach of 1891 to shape their policy with reference to the continued holding of high-priced bonds. For this reason it is not too early now to consider what legislation may be proper to remove this element of future uncertainty from the national banking system, and looking to the possible consideration of this subject by Congress, I respectfully submit the following statement of the question as it appears from the point of view officially occupied by the Comptroller of the Currency:

The fundamental postulates underlying every banking system established by law, whatever may be its form, must necessarily be:

First. That banks promote the general welfare of the community; and

Secondly. That the particular system established by law is the best obtainable under the conditions prevailing at the time and place.

These postulates, therefore, underlie our national banking laws.

The first postulate will not be questioned, since no people in modern times have ever risen to civilization, or maintained their civilization, without banks; and least of all can it be questioned in this country where, besides 2,868 national banks now in operation, we have over 5,000 State banks, savings banks, and private banks and bankers, whose operations extend into the minutest ramifications of the employments and resources of our 60,000,000 of population.

The second postulate involves the question, whether the present national-bank system should be preserved, and, if so, whether it is good enough as it is or whether it can be improved.

The National Currency Act of February 12, 1863, was controlled as to its purposes by the paramount necessity of inducing the banks and other capitalists to become purchasers of Government bonds under conditions that would give a basis of solid value to the currency then being paid out in immense volume under the pressure of military exigencies; hence the consolidation of these banks into a national banking system adapted to commercial and industrial needs appears only as a subordinate incident in the general scheme. As early, however, as the year 1864, it was perceived that the general welfare of the people would

be promoted by giving greater cohesiveness and method to the system regarded more especially in its banking than in its currency features, and from that time to this the effort of legislation has been to subordinate the issuing of currency to the more important functions performed by the banks as institutions of discount and deposit. The effect of this legislation and its wisdom are exemplified in the present high credit and the consequent wide commercial usefulness of national banks.

If the system could be preserved purely as one of deposit and discount, there would probably arise an almost universal sentiment in favor of bestowing upon its preservation immediate and careful attention, but it is doubtful whether the banks would find sufficient inducement to remain in the system without enjoying some privileges as to the issue of currency, and it has been questioned whether there is power under the Constitution for the charter of national banks, except as instrumentalities for a money circulation.

It follows, therefore, that any legislation directed to the improvement and permanent establishment of the national banking system must include some provision for the maintenance of a national-bank circulation, while on the other hand it appears that whatever opposition exists to the national banks attaches to them mainly as banks of issue, and under our system of government nothing can be regarded as permanently established until it has obtained the support of a well-settled public opinion. Hence it is evident that the problem now to be solved is how to remodel the currency features of the national-bank system so as to obtain popular approval of them.

Objections to the present national-bank currency appear to be comprised within three classes, namely:

1. A general objection to paper money in any form.
2. An objection to national-bank notes based upon the assumption that they take the place of an equal amount of paper money that might be issued directly upon the credit of the Government.
3. The objection that a currency determined in volume by a definite percentage upon deposited securities of high value can never possess the flexibility and elasticity of volume which are the chief commercial advantages of a bank currency in any form.

Against these objections it has been answered—

1. That the question as to having paper money at all is not at present a practical one, because it is evident that our people will have paper money in one form or another, and that of all forms of paper money of which we have had any experience, the present national-bank currency is the least objectionable, even to those who think that all such money should be avoided.

2. That while a bank currency based on Government bonds and redeemable in greenbacks may be considered as a kind of Government money, on which the banks are getting the profit, yet without this privilege, or some other equivalent to it, the national-bank system could never have been established, nor can it now be maintained, and that this is the cheapest price at which the people or the Government could have got any banking system so good in all respects and so valuable as this has proved to be.

Another argument is that the Government must pay interest upon its bonds whether these are held by the banks or not, hence the profit to the banks on these bonds has been obtained without charge on the Treasury; while, on the other hand, if the banks had not been offered sufficient inducement to invest in these bonds, many more of them

would have gone abroad at low prices, and the country as a whole would now be so much the worse off.

3. That the want of flexibility in the currency and of elasticity of volume are consequences arising from the scarcity of bonds and the high prices to which they have risen, and that this could not have been foreseen nor provided against in the original acts, but may now be remedied by proper legislation.

These objections and the answers to them are stated without comment. They are gathered from current discussion in the press, and seem worthy of consideration.

Some suggestions have been made to me as to new legislation on this subject, which, together with such conclusions as I have been able to reach, are subject to whatever disposition Congress may be pleased to order.

W. L. TRENHOLM,
Comptroller of the Currency.

Hon. JOHN G. CARLISLE,
Speaker of the House of Representatives.

REPORT OF THE CHIEF OF THE BUREAU OF ENGRAVING AND PRINTING.

TREASURY DEPARTMENT,
BUREAU OF ENGRAVING AND PRINTING,
October 15, 1886.

SIR: I have the honor to submit the following report on the operations of the Bureau of Engraving and Printing for the fiscal year ending June 30, 1886:

SECURITIES PRINTED.

There were finished and delivered during the year 26,655,496 sheets of securities. Of these 4,977,248 were United States notes, certificates, and bonds, and national-bank notes, amounting in value to \$563,506,290; 20,891,250 were sheets of internal-revenue and customs stamps, containing 478,624,050 stamps; and 786,998 were drafts, checks, certificates, licenses, and work of similar kinds. A large amount of miscellaneous work, not falling under any of the above heads, was also done for the various Departments of the Government.

The aggregate number of sheets delivered was 1,562,210 less than in the fiscal year 1885, and the deliveries of notes and securities 2,717,288 less. This falling off was chiefly due to the diminished production of United States notes, caused by the stoppage of the issue of \$1 and \$2 notes.

Since the close of the year the work of the Bureau has been greatly increased by the preparation of new silver certificates of small denominations, under the act of August 4, 1886, and of the various classes of oleomargarine stamps, under the act of August 2, 1886. As the latter act took effect in ninety days from its passage, it was necessary to engrave the plates in time to have the stamps in the hands of the collectors of internal revenue by the 1st of November. Fourteen different varieties and denominations of stamps being required, all of which had to be prepared from new designs, there was thrown upon the engravers a great amount of work, which somewhat interfered with the preparation of the plates for the new silver certificates. Plates for the one-dollar

certificate were, however, completed on September 6, 1886, and the first delivery of the certificates was made to the Treasurer of the United States on the 20th of that month, less than seven weeks after the passage of the act authorizing their issue. Certificates of this denomination are now being printed and delivered at the rate of 28,000 sheets, or \$112,000, a day. As the appropriation for this purpose was based upon an estimated demand of only 20,000 sheets of United States notes and certificates of all kinds, this result has been made possible only by carefully husbanding the resources of the Bureau. The plates for the two-dollar certificates are nearly finished, and the certificates will be ready for issue during the month of November. Work has been begun, also, upon the plates for the five-dollar certificate, the only other denomination authorized. In this and all other new work engraved by the Bureau the use of the so-called patent lettering has been discarded. This change has not only led to better and more artistic results, but has greatly reduced the expenses of the engraving branch. It is the purpose to gradually replace the plates produced by this method with new plates engraved by hand.

The work of sealing and separating the United States notes and certificates has been carried on in the Office of the Treasurer of the United States during the last year, in pursuance of the arrangement made in July, 1885. A separate appropriation for the persons employed upon this work was made by the appropriation act for the current fiscal year, but the force provided for was found to be insufficient to seal and separate the large quantities of notes and certificates recently delivered. The additional operatives required have accordingly, by direction of the Secretary, been detailed from this Bureau. It is understood that an estimate for the wages of such of these employes as will be permanently required in the Treasurer's Office will be submitted to Congress.

EXPENDITURES.

The expenses of the Bureau for the year, as compared with the fiscal year 1885, were:

	1885.	1886.
For salaries of officers and clerks and wages of employes other than plate-printers and their assistants.....	\$471,757 20	\$331,985 10
For plate printing, at piece rates, including the wages of plate-printers' assistants	330,704 22	203,598 03
For materials, tools, and miscellaneous expenses	153,442 60	154,191 81
For salaries of office of custodian of dies, rolls, and plates	7,741 45	6,349 05
For salaries of employes sealing and separating notes in Office of the Treasurer of the United States.....		5,558 25
For pay of special witness of destruction of securities.....	1,490 00	1,525 00
Total	965,195 47	763,207 84

The reduction in expenses, as compared with the preceding year, is, therefore, \$201,987.63. The cost of maintaining the Bureau was less than in any year since 1878. The lowest expenditure in any year within that period was \$814,077.01, in 1879, and the highest \$1,104,986.43, in 1883. Of the amount expended last year, \$18,296.85 was charged to the appropriation for salaries of the Bureau of Engraving and Printing, and \$299,347.78 to the appropriation for labor and expenses of engraving and printing. The remainder, \$445,563.21, is the amount charged for work done for the various Departments and for engraving plates for national banks, and transferred to the credit of the appropriation for

labor and expenses. The amount expended for salaries was \$6,433.18 less than the appropriation, and the amount charged to the appropriation for labor and expenses was \$176,352.22 less than the amount appropriated, making an aggregate saving in the appropriations of \$182,785.37, which will be returned to the Treasury unused. Advantage was taken of the large unexpended balance to buy, at a cost of \$15,195.75, a number of steam-presses and other machinery of permanent value to the Bureau, and not properly chargeable as a part of the cost of the work turned out during the year. During the last month of the fiscal year there were printed internal-revenue stamps costing, at the established rates, not less than \$17,000, for which the appropriations for the Bureau could not be reimbursed, on account of the exhaustion of the appropriation from which their cost should have been defrayed. If allowance were made for these two items, the saving in the appropriations made directly for the support of the Bureau would be \$215,000. A large share of the saving is due to the decrease in the work done, but at least \$125,000 may fairly be set down to the credit of the economies which have been made in the management of the Bureau.

APPROPRIATIONS AND ESTIMATES.

The estimates of the appropriations for the support of the Bureau for the current fiscal year provided for all of its expenses, in lieu of the former system under which more than half the amount spent was drawn from other appropriations. The estimates were divided under the four heads of "salaries," "compensation of employes," "plate printing," and "materials and miscellaneous expenses." Provision was made under the head of "salaries" for the officers, clerks, and others whose salaries are fixed by law; under the head of "plate printing," for the plate printers and their assistants; and under the head of "compensation of employes," for all of the rest of the employes. Appropriations were made in exact accordance with the estimates, except that the appropriation for compensation of employes, instead of fixing the number and wages of the persons to be employed, as the estimates provided, was made in a lump sum, retaining, so far as that part of the expenses is concerned, the defects of the old system of making appropriations. In submitting the estimates for the next fiscal year the estimate for the appropriation for compensation of employes has again been so framed as to fix the number and pay of the persons to be employed. This plan, if adopted, will place a limit which cannot be exceeded upon the number of persons who may be employed, and will prevent the expenditure of more than a proper proportional share of the appropriation during any part of the year. Annual salaries are estimated for, instead of the present daily wages. Provision for such salaries, on the one hand, will prevent the allowance of extra pay for "overtime," as required by the present system of daily wages reckoned on the basis of eight hours a day, and, on the other, will permit the granting of reasonable leaves of absence, with pay, to the employes, should the condition of the work warrant it.

The estimates for the expenses of this Bureau for the fiscal year 1888, as compared with the present fiscal year, are:

	1887	1888.
Salaries	\$17 430	\$17, 450
Compensation of employes ..	127, 740	152, 500
Plate printing	307 380	106 500
Materials and miscellaneous expenses	141 820	164 700
Total ..	784 500	901 000

The increase of \$106,640 is due to the increased quantity of engraving and printing which the various Departments and Bureaus of the Government estimate that they will require of this Bureau. The estimated number of sheets of securities of all kinds to be produced in 1888, is 35,992,794, as against 26,655,496 sheets delivered in 1886, and an estimated production of 29,532,550 during the current fiscal year. As compared with the estimates for 1887, the estimated increase in production is $21\frac{1}{2}$ per cent., while the increase in cost is only $13\frac{1}{2}$ per cent.

The estimates of the appropriations to be made are based upon a careful calculation of the number and wages of the employés, and of the cost of the materials needed to produce the securities required. The only additional employés estimated for are those who will be actually and necessarily employed in the various processes connected with the engraving, printing, and finishing of securities. No provision is made for any additional superintendents, clerks, watchmen, or messengers. On the contrary, the number of some of these classes of employés is cut down below the estimates for the present fiscal year.

Plate printing being paid for by the piece, the estimate for this purpose is simply a matter of calculation based upon the number of sheets of securities to be printed. The increase in the estimate for this item conforms, therefore, to the increase in the work. The estimate for plate printing for 1888, as compared with that for 1887, shows an increase of \$59,120, or more than 19 per cent., while the increase in the estimate for compensation of employés is only \$24,640, or less than 8 per cent. For the first time in the recent history of the Bureau the amount of the wages of the employés, other than the plate printers and their assistants, is brought below the cost of plate printing. As compared with 1885, the expense for salaries and compensation of employés is reduced from \$471,757.20 to \$369,830, while the cost of plate printing, which is the index of the work done, is increased from \$330,764.22 to \$366,500. It is proposed to produce in 1888, 35,992,794 sheets of securities at a cost of \$901,030. In 1883, when the work done approached most nearly to that to be done in 1888, 33,330,746 sheets were printed at a net cost of about \$1,088,000. The estimated production for 1888 is, therefore, 2,660,000 sheets greater, and the estimated cost \$187,000 less than in 1883.

THE FORCE EMPLOYED.

There has been a steady reduction in the force employed, month by month, since March 1, 1885. The number employed on that date was 1,145; on May 21, 1885, when the present Chief of the Bureau entered upon his duties, 1,040; on July 1, 1885, 912; on July 1, 1886, 839; and on October 1, 1886, 824. The latter number includes seven persons detailed for duty in the office of the Treasurer of the United States, so that the number actually employed in the Bureau on October 1, was 817, a reduction of 328 since March 1, 1885. This result has been accomplished only by taking advantage of every opportunity to simplify the methods of doing the work and to dispense with unnecessary employés. A special effort has been made to reduce the number of employés not directly connected with the printing or finishing of securities, like the clerks, messengers, and watchmen. As instances of what has been done in this direction, the annual expense of the force of watchmen and guides has been reduced from \$33,590 to \$16,790, or more than one-half, and of the clerks and messengers from \$62,393 to \$37,060.

From May 21, 1885, to October 1, 1886, a period of more than sixteen months, 41 persons have been taken into the service of this Bureau.

Of these 23 were operatives trained in the various processes, who were recalled from time to time as need for their services arose. Of the remaining 18, 3 were employed in the place of relatives whose health had broken down in the service, and 3 were transferred from the Treasury Department, leaving but 12 original appointments. This number is made up of 1 laborer, 1 binder, 2 charwomen, 3 engravers, and 5 printers' assistants. Under this policy the pressure for employment has greatly diminished.

The force now conforms very nearly to that estimated for, and it will be necessary to maintain it at about its present number in order to produce the work required of the Bureau. In consequence of the large demand for the new silver certificates and the increased orders for internal-revenue stamps of all kinds, and especially the oleomargarine stamps, for which no additional appropriation was made, this work now largely exceeds the expected production on which the estimates were based. It is not doubted, however, that by close management the Bureau will be able to meet all reasonable demands upon it during the remainder of the fiscal year.

I have the honor to be, with great respect, your obedient servant,
EDWARD O. GRAVES,

Hon. DANIEL MANNING,
Secretary of the Treasury.

Chief of Bureau.

REPORT OF FIRST COMPTROLLER OF THE TREASURY.

TREASURY DEPARTMENT,
FIRST COMPTROLLER'S OFFICE,
Washington, D. C., October 1, 1886.

SIR: In compliance with the request contained in your letter of August 24, 1886, I have the honor to submit the following report of the transactions of this office during the fiscal year which ended June 30, 1886.

The following described warrants were received, examined, countersigned, entered into registers, and posted into ledgers, under their proper heads of appropriations, viz:

* * * * *

DELIVERY OF DRAFTS TO ATTORNEYS.

Questions are constantly arising in this office for decision thereon, where claimants having just demands against the Government authorize attorneys under properly executed powers of attorney to prosecute their claims and receive the drafts to be issued in payment thereof, then revoke such powers of attorney or substitute other attorneys under subsequent powers of attorney, and, in some cases, even after the allowance of their claims, but just prior to the issuing or delivery of the drafts, substitute still other attorneys in the places of the substituted attorneys under powers of attorney of yet a later date. In such cases it becomes necessary to determine the conflicting rights of the attorneys to *receive* the drafts, or, at any rate, the proper attorneys or persons to whom to *deliver* them. Much inconvenience and delay are oftentimes thereby caused the claimants on the one hand, and the attorneys frequently claim that they are deprived of the just proceeds of their professional labors on the other. The exercise by the Comptroller of the jurisdiction to determine these questions seems in many cases at least a doubtful

one. While the authority to decide as to the *proper indorsement and collection or payment* of the drafts is vested in him, for the reason that he must necessarily pass upon the same in revising and settling the accounts of the Treasurer of the United States, yet his authority to exercise the jurisdiction above referred to is only such as is conferred upon him by the regulations of the Treasury Department on that subject. These provide (copying here only so much thereof as is material to the present point) as follow :

The claimant may change his attorney at any time, with the consent of the proper officers of the Department. * * * The Secretary reserves the right in all cases to make such special orders as may be proper. (Circular of October 10, 1876—Department No. 130.)

Hereafter the accounting officers will decide what persons as attorneys or claimants are entitled to receive drafts under the rules of the Department. (Circular of July 10, 1880—Department No. 62.)

The revocation of a power of attorney, or other authority to prosecute a claim, by a claimant or his legal representatives, will not be recognized, unless by decision to that effect by the proper accounting officer. * * * (Circular of February 6, 1886—Department No. 13.)

Even holding that under these regulations the jurisdiction mentioned is conferred upon the Comptroller, yet it seems a very doubtful question at what stage of the passage of claims through the Department, under what circumstances, and for what reasons, may claimants properly revoke powers of attorney duly executed, or substitute other attorneys in the places of those already duly authorized to act for them.

The statutes provide, that "the head of each Department is authorized to prescribe regulations, not inconsistent with law, for the government of his Department, the conduct of its officers, * * * and performance of its business" (Rev. Stat., 161)—the *delivery* of drafts to attorneys being a part of the performance of the business of the Treasury Department; and further provide:

That the Secretary of the Treasury may prescribe rules and regulations governing the recognition of agents, attorneys, or other persons representing claimants before his Department. * * * (Act July 7, 1884—23 Stat., 258.)

Hence, I deem it a matter of great importance, and well worthy of your consideration, whether regulations covering and governing the subject-matter above referred to should not be issued for the guidance of the Comptroller and other accounting officers, as well as attorneys and claimants; or whether the matter should not be called to the attention of Congress for the enactment of some statute to the same effect; and in this connection I respectfully ask leave to call your attention to the following former regulations of the Treasury Department on the same subject, in addition to those already cited:—Circular of Second Comptroller of April 25, 1867; Circular of May 23, 1872—Department No. 53; Circular of December 18, 1872—Department No. 138; Circular of March 19, 1874—Department No. 16; Circular of April 16, 1875—Department No. 45.

ASSIGNMENT OF CLAIMS UPON THE UNITED STATES.

There is a subject of a somewhat kindred nature with the above, to which I think the attention of Congress ought to be invited, in order that some definite determination of the same may be arrived at in the accounting system.

Section 3477 of the Revised Statutes prohibits "all transfers and assignments," and "all powers of attorney" or other authorities for receiving payment, "of any *claim* upon the United States," except such as are duly made and executed at the times and under the conditions and circumstances named in said section. (And at this point I will state

there are certain special exceptions to this general prohibition, where assignments are expressly authorized by law in a few cases.)

Two of my predecessors, Comptrollers Whittlesey and Porter—the former in a circular of some length dated May 2, 1853—held that the term “claim” as used in this section did not apply to salary-accounts and other demands of a like nature, certain, fixed, definite, and undisputed in character; and that, therefore, assignments, and powers of attorney to receive payment, of these, were not prohibited by the statute and would be recognized. This view seems to be concurred in by Solicitor-General Phillips in an opinion given in a letter to the Secretary of the Treasury of May 28, 1883, which is approved by Attorney-General Brewster.

On the contrary, my immediate predecessor, Comptroller Lawrence, and Second Comptroller Upton, rendered opinions, both of which are contained in the printed reports of this Office, construing the term “claim” as used in the above section to “embrace every claim against the United States, however arising, of whatever nature it may be, and wherever and whenever presented”—whether certain, fixed, definite, and undisputed, or uncertain, unfixed, indefinite, and disputed. Since assuming charge of the duties of this Office I have followed the latter construction, for the reason that I deemed it in accordance with the principles settled by the decisions of the Supreme Court construing said section, in the cases of *United States v. Gillis* (95 U. S., 413), *Spofford v. Kirk* (97 U. S., 489), and *Goodman v. Niblack* (102 U. S., 560). See, also, 9 Op. Att.-Gen., 190; and 16 *Id.*, 262.

It thus appears, that there have been opposing opinions by the accounting officers upon the proper construction of the said section; and I am informed that the present accounting officers do not agree in their interpretation of the same. These conflicting constructions, all founded on reasonable doubts as to what is the proper conclusion at which to arrive, are productive of considerable confusion in the process of accounting.

It seems, therefore, that much of the uncertainty and inconvenience now encountered by the accounting officers in their construction of this statute would be removed by an explanatory act of Congress defining the term “claim” as used above in such manner as to leave no doubt of its proper construction. Hence, I urge upon you the necessity of calling the attention of Congress to the matter for its appropriate action thereon.

COMPENSATION OF COMMISSIONERS OF THE CIRCUIT COURTS.

Accounts of United States district attorneys, marshals, clerks of courts, and circuit-court commissioners are revised and settled in this Office. The compensation of the two first-named officers is derived from the fees of their offices together with a small nominal annual salary, and of the two last-named entirely from the fees of their offices.

In the case of district attorneys, marshals, and clerks there is a limit placed by law on the amount that may be retained by them of the fees and emoluments of their offices earned during a year (Rev. Stat., 835, 841, 839); but in the case of commissioners there is no such limit under existing law.

Thus, in many instances, as shown by the records of this office, the fees earned by, and allowed to, commissioners during a given year amount to more than \$5,000—an annual compensation greater than that of most of the United States district judges, and very little less than that of the United States circuit judges.

I regard such compensation as very disproportionate to the value of the services of the commissioners, who are merely examining and bailing or committing magistrates; and I think some legislation by Congress limiting the amount that may be retained by them of the fees and emoluments of their offices earned during a year, and requiring the balance of the same to be turned into the Treasury of the United States, is necessary, just, and proper, and would have a salutary effect—what such limit shall be I leave to your wise discretion to suggest to Congress. This matter is here mentioned for your consideration, because I am very sure the amount of the annual compensation earned by these officers is not fully understood outside of the narrow circle of the accounting officers and the commissioners themselves.

* * * * *

RENEWAL OF FORMER RECOMMENDATIONS.

Except the recommendation relating to “increase and changes in clerical force” of this office, I respectfully call attention to, and renew, those made in my last annual report, the propriety of which seems to me to be confirmed by my observation and experience during the past year.

I beg to commend the officers and employes of this bureau for the efficiency and diligence with which they have in the main discharged their duties.

It became necessary to dispense with the services of but very few during the past year, and in no case without cause appearing which would have been deemed sufficient by any reliable business house in this country.

With the additional force provided by the last appropriation act I see my way very clear to dispose of all the back work, some far in arrears, and to have the clerks engaged entirely on the current business of the office.

I have the honor to be, very respectfully,

M. J. DURHAM,
First Comptroller.

Hon. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF SECOND COMPTROLLER OF THE TREASURY.

TREASURY DEPARTMENT,
SECOND COMPTROLLER'S OFFICE,
Washington, D. C., October 15, 1886.

SIR: Pursuant to the request contained in your letter of August 24, to report to the Secretary of the Treasury the transactions of this office during the past fiscal year, and the present condition of the public business intrusted to my charge, I have the honor to report that the following is a summary statement of the work performed in the Office of the Second Comptroller for the fiscal year ended June 30, 1886, in tabular form, with a comparative statement showing the work of like character done in the preceding fiscal year:

* * * * *

INSURANCE AND CHARTER PARTY CLAIMS.

January 16, 1886, the Secretary of the Treasury transmitted to this office for examination, under section 191 of the Revised Statutes, 330 claims, amounting to \$349,408.39, which had been previously adjusted

by the accounting officers and reported to Congress at its Forty-eighth session for an appropriation, which had not been made.

These claims were re-examined and claims to the amount of \$197,627.12 were rejected. The rejected claims included a class amounting to \$94,873.61, which involved the liability of the Government to pay insurance companies for losses incurred within the risk of their policies by the destruction of steamboats employed in the military service during the war of the rebellion.

They also included a class, aggregating \$73,000, which involved the liability of the Government to pay the owners of vessels employed under charter-parties during the war compensation for the time during which the vessels were laid up for repairs, which the owners had covenanted to make.

These cases were important not only because of the amount directly involved, but as precedents controlling the determination of many other claims of like character against the United States involving large amounts.

A detailed statement of the claims, with the reasons in full for their rejection, will be found in Treasury Department Document No. 834, Executive Document No. 210, Forty-ninth Congress, first session.

WAR RENT-CLAIMS.

An examination has also been made of the entire subject of the liability of the United States for the use and occupation of real estate at the theater of war by the military forces during the late rebellion in the case of the claim of the Christian Church at Paducah, Ky., for use of their church property for hospital purposes in 1862, and the conclusion reached that the accounting officers have no jurisdiction to examine and adjust claims of this character, except in cases where there had been a previous express agreement, or what was tantamount thereto, between the owner of the property and an authorized agent of the Government, upon the faith of which the possession of the property was surrendered to the military authorities. The decision involves claims to the amount of more than one-half million of dollars now pending before the accounting officers, and which will be disposed of in accordance therewith.

STATUTE OF LIMITATIONS.

An examination has also been made of the question whether there is any statutory limitation of time barring the presentation of claims under an appropriation which has been exhausted or covered into the Treasury pursuant to the provisions of the act of June 20, 1874 (18 St., 110), in the case of the claim of William B. Moses & Son, and it has been held that where the sole authority for the creation of a claim, or the incurring of an expenditure, is an appropriation by Congress for that purpose, and the appropriation has been exhausted, or has been covered into the Treasury under the provisions of the act of 1874, the accounting officers have no jurisdiction, unless the appropriation is one of the several classes excepted from the operation of the act of 1874, or unless the claim was one which had been filed within five years after the passage of the act of June 14, 1878 (20 St., 130).

This decision is now applied in the practice of the office, and will result in the exclusion of a large class of stale demands, the consideration of which has heretofore obstructed the proper work of the office.

SIGNAL SERVICE ACCOUNTS.

A special examination and revision has also been made, in connection with the Third Auditor, of the disbursements of the Signal Service

from September 1, 1880, until July 1, 1886, embracing expenditures to the amount of \$1,865,333.04, which resulted in the suspension and disallowance of items therein aggregating \$1,081,669.51.

NEW RULES.

By the concurrent action of the Second, Third, and Fourth Auditors and the Second Comptroller, a set of rules regulating the practice in matters common to their offices was adopted with the approval of the Secretary of the Treasury November 10, 1885, which have tended to harmonize the practice and facilitate the transaction of public business before these accounting officers.

OFFICE LIBRARY.

The law library of the office has been rearranged and recatalogued. It comprises 1,456 volumes, 463 of which are in the room of the Second Comptroller, and the remainder distributed through the rooms of the chiefs of division. It is mainly well-selected and made up of standard elementary works, digests, and Federal reports. The sets of circuit and district court reports are broken and incomplete and should be filled up.

OFFICE APPROPRIATIONS.

The appropriations for the salaries of the officers and employes for the fiscal year ended June 30, 1886, aggregated \$118,100, of which \$3,918 remained unexpended at the close of the year. The appropriations for the same purpose for the current fiscal year (1887) amount to \$105,820. The estimate of like appropriations for the fiscal year ending June 30, 1888, are \$95,020.

Very respectfully,

I. H. MAYNARD,
Comptroller.

To Hon. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF THE COMMISSIONER OF CUSTOMS.

TREASURY DEPARTMENT,
OFFICE OF COMMISSIONER OF CUSTOMS,
Washington City, D. C., October 12, 1886.

SIR: I have the honor to submit herewith, for your information, a statement of the business of this office for the fiscal year ending June 30, 1886:

* * * * *

There was paid into the Treasury from sources, the accounts relating to which are settled in this office:

Customs (duties).....	\$192,397,844 45
Customs (tonnage).....	506,224 50
Marine hospital tax.....	5,573 00
Steamboat fees.....	106,163 33
Fines, penalties, and forfeitures.....	128,843 58
Storage, fees, &c.....	729,496 13
Emolument fees.....	154,205 72
Immigrant fund.....	181,547 00

Shipping fees	\$56,379 00
Sale old custom-house, Cincinnati	100,000 00
Rent of public buildings	3,512 31
Relief of sick and disabled seamen	2,053 16
Mileage of examiners	1,633 15
Sale of unclaimed merchandise	894 48
Deceased passengers	690 00
Interest on debts due	278 96
Proceeds of Government property	7,925 20

Aggregate 194,384,569 04

And there was paid out of the Treasury on the following accounts:

Expenses of collecting the revenue from customs	\$6,427,612 07
Excess of deposits	3,269,561 45
Debentures	8,073,852 05
Construction and maintenance of lights	2,073,358 91
Construction, &c., of public buildings	1,735,121 13
Construction and maintenance of revenue-cutters	905,142 33
Life-Saving Service	880,735 26
Marine Hospital Service	466,799 27
Expenses of regulating immigration	162,962 07
Salaries and expenses, shipping service	53,325 40
Compensation in lieu of moieties	24,500 22
Salaries and expenses of agents at seal fisheries in Alaska	22,937 49
Quarantine stations for neat cattle	18,103 57
Detection and prevention of frauds upon the customs revenue	15,332 07
Refunding duties on lumber destroyed, Oswego	11,537 71
Unclaimed merchandise	1,930 21
Extra pay to officers and men who served in the Mexican war (revenue marine)	1,017 03
Debentures and other charges	577 05
Refunding penalties or charges erroneously exacted	332 26
Refunding moneys erroneously received and covered into the Treasury	258 76
Refunding proceeds of goods seized and sold	247 03

Aggregate 24,165,246 36

I inclose herewith statements of transactions in bonded goods, as shown by the adjusted accounts; of property brought into the United States for temporary purposes, under section 2507 Revised Statutes, and in relation to unclaimed merchandise entered and sold.

In conclusion I beg leave to call your attention to the recommendations made in my last report.

I am, very respectfully, your obedient servant,

JOHN S. McCALMONT,
Commissioner of Customs.

The Hon. SECRETARY OF THE TREASURY.

B.—STATEMENT of TRANSACTIONS under SECTION 2507, REVISED STATUTES, and DECISION 4314, November 20, 1879, of ENTRY of HORSES, WAGONS, HARNESS, MACHINERY, &c., BROUGHT INTO THE UNITED STATES for TEMPORARY PURPOSES, for the year ending June 30, 1886.

Districts.	Balance of bonds from last report.	Amount of bonds taken.	Amount of bonds canceled.	Balance of bonds not due.	Amount of duties collected.
Aroostook	\$4,693 35	\$39,637 15	\$40,827 05	\$3,503 45	.....
Bath	444 80	11,340 15	8,266 10	3,518 85	\$555 70
Cape Vincent	37 50	1,606 65	1,562 15	82 00	303 00
Champlain	2,105 00	5,105 80	5,852 45	1,418 35	67 75
Minnesota	1,416 80	9,683 32	4,465 33	0,634 79	148 50
Portsmouth .....	.....	20 00	20 00	.....	.....
Vermont	2,360 90	11,812 66	12,540 16	1,633 40	1,899 70
Total	11,058 35	79,265 73	78,533 24	16,790 84	2,974 65

RECAPITULATION.

Balance of bonds from last report.....	\$11,058 35
Amount of bonds taken.....	79,265 73
Total.....	90,324 08
Amount of bonds canceled.....	73,533 24
Balance of bonds not due.....	16,790 84
Total.....	90,324 08

C.—STATEMENT of DUTIES COLLECTED on UNCLAIMED GOODS ENTERED and AMOUNT of NET PROCEEDS of UNCLAIMED GOODS SOLD, year ending June 30, 1886.	
Duties received.....	\$362,508 87
Net proceeds of sales.....	3,500 27

REPORT OF THE FIRST AUDITOR OF THE TREASURY.

TREASURY DEPARTMENT,
FIRST AUDITOR'S OFFICE,
Washington, October 30, 1886.

SIR: I have the honor to submit herewith the annual report of this Bureau for the fiscal year ending June 30, 1886.

Attention is called to the following Exhibits of the business transacted in this office during the year:

Accounts adjusted.	Number of accounts.	Amount.
RECEIPTS.		
Duties on merchandise and tonnage.....	1,219	\$190,653,818 84
Steamboat fees.....	1,166	110,035 84
Fines, penalties, and forfeitures.....	676	86,368 61
Marine-hospital money collected.....	802	31,031 86
Immigration fees.....	165	178,751 59
Moneys received on account of deceased passengers.....	35	710 00
Moneys received from sales of old material, &c.....	324	482,341 87
Shipping fees.....	348	58,049 38
Miscellaneous receipts.....	17	1,108,103 83
Moneys retained from Pacific railroad companies for accrued interest on bonds.....	12	1,137,125 76
Treasurer of the United States for moneys received.....	4	600,058,058 38
Mints and assay offices.....	48	102,873,177 75
Water rents, Hot Springs, Ark.....	6	5,912 50
Accounts of the collector of taxes for the District of Columbia for taxes collected by him and deposited.....	12	1,606,704 80
Total.....	4,834	898,090,191 10
DISBURSEMENTS.		
LEGISLATIVE.		
United States Senate.		
Salaries and mileage of Senators.....	4	325,566 24
Salaries officers and employes.....	6	295,199 02
Contingent expenses:		
Stationery and newspapers.....	5	9,536 03
Horses and wagons.....	4	3,571 96
Fuel for heating apparatus.....	4	7,385 20
Furniture and repairs.....	5	9,074 07
Folding documents.....	5	2,396 75
Materials for folding.....	3	2,847 30
Packing-boxes.....	1	32 20
Expenses of special and select committees.....	7	24,667 81
Miscellaneous items.....	8	94,072 73
Salaries of Capitol Police.....	2	18,300 00
Reporting proceedings and debates.....	12	25,000 00
Compiling Congressional Directory.....	2	1,200 00
Postage.....	3	200 00
Payment to W. P. Brownlow.....	1	25 00

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
LEGISLATIVE—Continued.		
<i>House of Representatives.</i>		
Salaries and mileage of Members and Delegates.....	13	\$1,882,405 08
Salaries officers and employes.....	84	444,373 07
One month's extra pay to officers and employes.....	4	37,071 71
Contingent expenses.		
Stationery and newspapers.....	4	47,436 08
Fuel for heating apparatus.....	6	8,841 48
Furniture and repairs.....	5	9,330 41
Materials for folding.....	5	12,774 97
Packing boxes.....	1	2,987 00
Cartage.....	2	380 50
Miscellaneous items.....	7	25,087 08
Salaries of Capitol Police.....	2	18,397 36
Postage.....	7	545 00
Select Committee on Steel-Producing Works of the United States.....	1	1,000 00
Select Committee on Indian Affairs and Yellowstone National Park.....	1	4,000 00
<i>Office of Public Printer.</i>		
Salaries.....	12	15,300 00
Contingent expenses.....	28	2,002 37
Removal and storage of certain materials.....	12	2,443 00
Public printing and binding.....	137	2,305,074 94
Printing annual report of Commissioner of Agriculture.....	23	112,223 51
Publication of the Tenth Census reports.....	20	61,000 02
Printing annual report Bureau of Animal Industry.....	8	8,000 00
<i>Library of Congress.</i>		
Salaries.....	4	20,290 00
Increase of Library.....	8	10,773 36
Works of art for the Capitol.....	6	15,004 00
Contingent expenses.....	8	1,470 70
<i>Botanic Garden.</i>		
Salaries.....	7	15,400 75
Improving Botanic Garden.....	7	6,121 58
Improving buildings.....	4	7,100 00
<i>Court of Claims.</i>		
Salaries judges, &c.....	108	29,840 00
Reporting decisions.....	1	1,000 00
Contingent expenses.....	6	2,840 00
Payment of judgments.....	3	7,200 00
<i>Legislative, miscellaneous.</i>		
Dedication of Washington Monument.....	2	630 00
EXECUTIVE.		
<i>Office of the President.</i>		
Salary of the Vice-President.....	12	4,071 12
Salaries Executive Office.....	5	20,700 10
Contingent expenses.....	4	4,003 33
Preventing the spread of epidemic diseases.....	53	67,535 05
<i>Civil Service Commission.</i>		
Salaries.....	122	20,850 00
Traveling expenses.....	8	3,790 00
Contingent expenses.....	9	1,707 30
<i>Department of State.</i>		
Salaries.....	5	113,845 00
Contingent expenses.....	12	4,147 97
<i>Treasury Department.</i>		
Salaries:		
Office of Secretary.....	6	620,700 23
Office of Supervising Architect.....	4	17,105 12
Office of First Comptroller.....	5	80,030 84
Office of Second Comptroller.....	5	112,855 64

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
EXECUTIVE—Continued.		
Treasury Department—Continued.		
Salaries—Continued.		
Additional clerks adjusting accounts Soldiers' Home.....	4	\$8,652 65
Office of Commissioner of Customs.....	6	60,965 84
Office of First Auditor.....	6	107,936 48
Office of Second Auditor.....	4	207,111 12
Office of Third Auditor.....	6	213,340 00
Office of Fourth Auditor.....	6	83,617 97
Office of Fifth Auditor.....	5	46,280 70
Office of Sixth Auditor.....	5	472,358 46
Office of Treasurer of United States.....	5	258,502 56
Office of Treasurer (national currency reimbursable, permanent).....	6	95,012 74
Office of Register.....	4	158,310 15
Office of Comptroller of the Currency.....	5	97,349 28
Examinations of national banks and bank plates.....	4	529 77
Salaries:		
Office of Comptroller of Currency (national currency, reimbursable, permanent).....	6	18,047 51
Office of Life-Saving Service.....	4	37,154 42
Office of Light-House Board.....	6	49,166 16
Bureau of Navigation, Treasury Department.....	5	21,506 00
Bureau of Statistics.....	6	58,673 53
Collecting statistics relating to commerce.....	16	5,316 99
Salaries:		
Secret Service Division.....	5	16,185 90
Office of Supervising Surgeon-General, Marine-Hospital Service.....	4	27,172 71
Office of Supervising Inspector-General, Steamboat-Inspection Service.....	4	10,135 39
Salaries, office of Standard Weights and Measures.....	3	4,270 37
Contingent expenses, office of Standard Weights and Measures.....	5	177 54
Salaries, Steamboat-Inspection Service (permanent).....	6	198,332 27
Contingent expenses, Steamboat-Inspection Service (permanent).....	1050	30,907 71
Salaries and expenses of special inspectors foreign steam vessels (permanent).....	135	20,154 97
Treasury—Miscellaneous.		
Contingent expenses, Treasury Department:		
Stationery.....	271	63,843 91
Binding, newspapers, &c.....	7	2,008 06
Investigation of accounts and traveling expenses.....	9	1,411 54
Freight, telegrams, &c.....	9	4,173 98
Rent.....	6	9,581 25
Horses, wagons, &c.....	7	3,615 17
Ice.....	9	2,607 29
File holders and cases.....	12	10,764 85
Fuel, &c.....	6	7,117 16
Gas, &c.....	6	11,953 48
Carpets and repairs.....	12	3,797 22
Furniture, &c.....	11	8,988 31
Miscellaneous items.....	13	9,638 44
Postage.....	1	500 00
Postage to Postal Union countries.....	3	2,754 00
Library, Treasury Department.....	5	322 70
Expenses of national currency.....	12	19,997 46
Contingent expenses, national currency, Treasurer's Office, reimbursable (permanent).....	69	83,005 75
Distinctive paper for United States securities.....	21	37,889 58
Transportation of gold coin.....	3	54,514 00
Transportation of silver coin.....	113	75,358 98
Storage of silver; transportation.....	2	5,965 20
Recinage of gold and silver coin.....	3	10,043 48
Pay of assistant custodians and janitors.....	10	340,231 85
Inspector of furniture and other furnishings for public buildings.....	3	2,429 02
Fuel, lights, and water for public buildings.....	98	860,189 80
Furniture and repairs of same, public buildings.....	60	220,902 90
Heating apparatus for public buildings.....	33	151,073 06
Vaults, safes, and locks for public buildings.....	10	40,513 51
Plans for public buildings.....	7	3,725 59
Salaries and traveling expenses of agents at seal fisheries.....	19	9,196 73
Protection of sea otter hunting-grounds and seal fisheries.....	1	15,000 00
Compensation in lieu of moieties.....	149	28,291 17
Lands and other properties of the United States.....	14	701 25
Suppressing counterfeiting and other crimes.....	27	47,423 74
North American Ethnology, Smithsonian Institution.....	8	30,441 16
Propagation of food-fishes.....	39	211,958 08
Expenses of inquiry respecting food-fishes.....	3	2,715 23
Illustrations for report on food-fishes.....	2	217 15
Sailing vessels for food-fishes.....	7	8,250 74

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
EXECUTIVE—Continued.		
Treasury—Miscellaneous—Continued.		
Fish Commission buildings, Wood's Holl, Mass.....	15	\$32,304 90
Statnary and tablets for the Saratoga monument.....	5	40,000 00
Marine-Hospital Service.....	120	186,742 85
Salaries and expenses National Board of Health.....	16	4,830 00
World's Industrial Exposition, New Orleans.....	18	51,517 77
Final aid to the World's Industrial and Cotton Centennial Exposition.....	313	328,307 25
Industrial Exposition, Cincinnati, Ohio.....	9	93 16
Southern Exposition, Louisville, Ky.....	8	430 00
Expenses incurred under act relating to Chinese.....	5	3,804 50
Outstanding liabilities (permanent).....	123	13,725 16
Refunding to national banks duties in excess (permanent).....	1	30 80
Expenses of Smithsonian Institution (permanent).....	2	42,180 00
To promote the education of the blind (permanent).....	1	10,000 00
Extra pay to officers and men engaged in war with Mexico, revenue marine (permanent).....	11	518 12
Sinking fund Pacific Railroads (permanent).....	7	2,022,225 00
TREASURY DEPARTMENT—PUBLIC DEBT (PERMANENT).		
Interest.		
Funded loan of 1907.....	106	18,000,514 00
Funded loan of 1891.....	19	9,550,154 11
Loan of July and August, 1861.....	7	356 85
Funded loan of 1881.....	18	2,271 05
Loan of 1863.....	1	87
Three per cent. loan of 1882.....	107	5,737,845 21
Central Pacific stock.....	27	776,973 00
Kansas Pacific stock.....		189,340 00
Union Pacific stock.....		815,205 30
Central Branch Union Pacific stock.....		48,390 00
Western Pacific stock.....		59,086 80
Sioux Pacific stock.....	6	48,909 00
Louisville and Portland Canal Company.....		12,150 00
Navy pension fund.....	1	420,000 00
Forty-fifth instalment of Spanish indemnity.....	2	27,221 62
Coin coupons.....	118	7,582,743 00
Water stock of District of Columbia.....	2	26,250 00
Redemption-called bonds.		
Oregon war debt.....	1	118 00
Loan of July and August, 1861.....	1	58,219 28
Five-twenties of 1862.....	1	60,147 82
Loan of 1863.....	1	8,362 11
Ten-forties of 1864.....	1	11,573 52
Five-twenties of July, 1864.....	1	4,200 64
Five-twenties of 1865.....	1	302 02
Consols of 1865.....	1	14,813 54
Consols of 1867.....	1	722,034 50
Consols of 1868.....	1	12,820 04
Funded loan of 1881.....	1	66,407 18
Three per cent. loan of 1882.....	1	171,871 88
Refunding certificates for conversion.....	12	40,757 35
Currency certificates of deposit.....	12	57,865,000 00
Gold certificates.....	12	185,860 00
One-year notes.....	12	1,731 00
Two-year notes.....	3	164 40
Six per cent. compound-interest notes.....	12	3,804 92
Seven-thirties, 1861.....	1	53 85
Seven-thirties, 1864.....	6	1,870 10
Louisville and Portland Canal Company.....	1	468,970 00
United States notes.....	1	106 00
Redemption-sinking fund.		
Loan of July and August, 1861.....	1	79,914 58
Five-twenties of 1862.....	1	12,751 10
Loan of 1863.....	1	3,644 52
Ten-forties of March, 1864.....	1	1,320 04
Five-twenties of June, 1864.....	1	50 25
Consols of 1865.....	1	2,229 01
Consols of 1867.....	1	1,866 12
Funded loan of 1881.....	1	218,029 76
Three-per-cent. loan of 1882.....	8	27,323,486 15

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
TREASURY DEPARTMENT—PUBLIC DEBT (PERMANENT)—Continued.		
<i>Destroyed.</i>		
Legal-tender notes	13	\$63,420,000 00
Fractional currency	2	11,811 88
Silver certificates	12	23,023,001 00
Gold certificates	12	11,972,855 00
Old demand notes	10	815 00
TREASURY DEPARTMENT.		
<i>Customs (permanent).</i>		
Expenses of collecting the revenue from customs	2,678	6,899,561 18
Detection and prevention of frauds upon the customs revenue	13	25,998 88
Excess of deposits	529	3,794,194 53
Debitures and drawbacks	245	16,832,823 21
Official emoluments	1,800	847,676 93
Expenses of immigration	90	184,656 98
Expenses of shipping commissioners	219	49,129 39
Duties, &c., refunded	750	125,729 65
Judgments satisfied	429	279,013 22
Additional pay to inspectors of customs	46	72,141 00
Miscellaneous accounts	94	87,881 62
<i>Engraving and printing.</i>		
Salaries, Bureau of Engraving and Printing	13	39,843 86
Labor and expenses of engraving and printing	29	753,117 87
Portrait of the late Henry B. Anthony	1	735 75
Portrait of the late William A. Duncan	1	442 45
Portrait of the late John H. Evans	1	494 87
<i>Coast and Geodetic Survey.</i>		
Salaries	9	481,179 40
Party expenses	12	116,072 17
Transcontinental work	8	17,781 57
Points for State surveys	3	12,740 50
Repairs of vessels	11	62,532 76
Publishing observations	6	8,643 43
General expenses	19	101,721 49
Coast Survey steamer for Pacific coast	5	59,275 11
<i>Revenue-Cutter Service.</i>		
Expenses, Revenue-Cutter Service	524	864,985 82
Rebuilding revenue steamer Richard Rush	9	78,822 70
Rebuilding or purchase of revenue vessels (permanent)	8	197 85
Rebuilding revenue steamer William P. Fessenden	1	.....
<i>Life-Saving Service.</i>		
Life-Saving Service	300	1,089,644 34
Establishing life-saving stations	21	35,356 20
<i>Light-House Establishment.</i>		
Salaries, keepers of light-houses	67	443,825 81
Supplies of light-houses	107	243,679 86
Repairs of light-houses	73	220,451 97
Expenses of light-houses	31	153,587 00
Expenses of buoyage	77	256,038 12
Expenses of fog-signals	42	25,820 18
Inspecting lights	11	2,083 92
Lighting and buoyage of rivers	22	181,738 75
Maintenance of lighted buoys	4	5,692 00
Survey of light-house sites	9	1,100 47
Steam tender for the Pacific coast	8	68,786 11
Keepers of Sharp's Island light station, reimbursement	2	100 85
Construction of light-stations	72	114,837 55
Establishment of lights	23	75,041 99
Establishment of fog signals	13	11,761 91
Establishment of buoys and beacons	9	1,537 20

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
TREASURY DEPARTMENT—Continued.		
<i>Public Buildings.</i>		
Treasury building, Washington, D. C	12	\$17,562 28
Reconstructing eastern portion Smithsonian Institution	2	2,256 12
Construction of court-houses, custom-houses, post-offices, &c.	682	2,292,768 41
Purchase of wharf at Wilmington, N. C	1	2 75
Construction of marine hospitals	27	104,123 57
Fire-proof building, National Museum	1	898 03
Repairs to jail, Sitka, Alaska	6	1,000 00
Additional site for Bureau of Engraving and Printing	1	8,614 25
Repairs and preservation of public buildings	87	164,054 43
Repairs and preservation of marine hospitals	19	26,827 21
Bridewell Dock property	1	818 00
<i>Independent Treasury.</i>		
Salaries:		
Office of assistant treasurer, Baltimore, Md.	4	21,000 00
Office of assistant treasurer, Boston, Mass	4	36,053 04
Office of assistant treasurer, Chicago, Ill	7	23,134 81
Office of assistant treasurer, Cincinnati, Ohio	8	15,000 00
Office of assistant treasurer, New Orleans, La	4	12,014 02
Office of assistant treasurer, New York, N. Y.	6	161,616 30
Office of assistant treasurer, Philadelphia, Pa.	4	55,063 50
Office of assistant treasurer, Saint Louis, Mo.	5	15,067 20
Office of assistant treasurer, San Francisco, Cal.	4	27,895 51
Special agents, Independent Treasury	9	5,996 06
Checks and drafts, Independent Treasury	21	28,554 81
Contingent expenses, Independent Treasury	220	50,673 15
Treasurer's general account of receipts and expenditures	4	517,287,471 04
<i>Mints and Assay Offices.</i>		
Salaries, office of Director of the Mint	5	27,275 10
Contingent expenses, office of Director of the Mint	121	4,738 24
Freight on bullion and coin	14	9,251 30
Salaries, wages, and contingent expenses of United States mints and assay offices	836	1,294,627 67
Gold and silver bullion	28	65,462,313 41
<i>Government in the Territories.</i>		
Salaries of governors, &c.:		
Territory of Alaska	48	12,117 43
Territory of Arizona	48	12,613 91
Territory of Dakota	74	21,073 88
Territory of Idaho	64	14,791 32
Territory of Montana	40	12,000 00
Territory of New Mexico	38	12,426 48
Territory of Utah	45	12,400 00
Territory of Washington	53	17,000 00
Territory of Wyoming	45	12,741 12
Legislative expenses	41	112,215 45
Contingent expenses	23	2,056 25
Law library, Wyoming Territory	1	24 00
Compensation, Utah Commission	60	25,000 00
Contingent expenses, Utah Commission	12	12,906 43
Compensation and expenses, officers of election, Utah	8	17,028 44
DISTRICT OF COLUMBIA.		
Improvements and repairs	29	406,862 26
Constructing, repairing, and maintaining bridges	26	4,139 51
Washington aqueduct	11	22,784 04
Washington Asylum (support)	26	56,200 97
Washington Asylum (buildings)	9	12,000 00
Georgetown almshouse	14	1,720 50
Hospital for the insane	14	52,433 00
Transportation of paupers and prisoners	24	2,571 20
Reform School	4	31,438 69
Reform School buildings	4	690 11
Columbia Hospital for Women, &c.	4	15,003 20
Columbia Hospital for Women, payment of taxes assessed	1	31 20
Children's Hospital	6	5,001 12
Saint Ann's Infant Asylum	5	6,251 12
Industrial Home School	3	8,342 00
National Association for Colored Women and Children	5	6,841 20
National Association for Colored Women and Children (building)	14	12,001 20
Women's Christian Association	6	5,356 51
Saint John's Church Orphanage	1	1,800 00

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
DISTRICT OF COLUMBIA—Continued.		
House of the Little Sisters of the Poor	1	\$3,030 30
Relief of the poor	15	15,290 33
Salaries and contingent expenses District offices	51	158,587 67
Public schools	39	457,321 34
Buildings and grounds, public schools	19	99,711 42
Buildings and grounds, public schools (Holmes Cemetery fund)	6	24,457 83
Metropolitan police	20	331,025 08
Metropolitan police (buildings)	11	15,000 00
Fire department	24	111,064 44
Telegraph and telephone service	24	14,461 00
Health department	28	44,543 78
Courts	29	14,914 92
Payment of referees, Court of Claims	7	390 00
Judgments	3	320 96
Payment of legal obligations	3	2 00
Streets	24	708,480 28
Interest and sinking fund	13	798,245 16
Redemption of certificates of indebtedness	2	368 96
Miscellaneous expenses	29	13,297 53
General expenses	2	3,800 68
Contingent expenses District of Columbia	16	981 25
Expenses of assessing real property	9	2,918 57
To maintain public order	4	108 72
Reimbursement to Seth L. Phelps	6	166 50
Water department	28	74,483 75
Miscellaneous and contingent expenses	3	12,881 83
District of Columbia, &c.	3	411,438 23
Guarantee fund	16	43,144 33
Completion of sewerage system	16	314,230 65
Employment for the poor filling up grounds	1	80 00
Refunding water rents and taxes	12	354 74
Refunding taxes	10	3,125 54
Redemption of tax-lien certificates	9	5,067 43
Redemption of assessment certificates	12	189 30
Washington redemption fund	13	144 41
Washington special-tax fund	9	7,333 98
Fireman's relief fund	2	151 94
Police relief fund	8	1,394 48
WAR DEPARTMENT.		
Salaries:		
Office of Secretary	4	83,023 78
Office of Adjutant-General	5	689,024 17
Rent furniture, &c., office of Adjutant-General	1	667 49
Salaries:		
Office of Inspector-General	4	3,568 06
Office of Military Justice	6	13,224 25
Signal Office	5	52,748 16
Office of Quartermaster-General	6	223,418 06
Compensation and expenses of agents, Quartermaster's Department	6	29,750 82
Salaries:		
Office of Commissary-General	4	43,507 50
Office of Surgeon-General	6	514,854 70
Office of Paymaster-General	4	62,888 52
Office of Chief of Ordnance	4	44,819 08
Office of Chief of Engineers	5	22,957 15
Office of Publication of Records of the Rebellion	6	31,012 29
Superintendent, &c., building corner Seventeenth and F streets	5	6,584 41
Stationery	1	6,344 88
Rent of buildings	1	9,810 00
Contingent expenses War Department	1	14,943 43
Salaries of employees public buildings and grounds, under Chief Engineer	11	34,806 18
Contingent expenses, public buildings and grounds, under Chief Engineer	11	305 12
Rent of office, public buildings and grounds, under Chief Engineer	11	750 00
Public buildings and grounds.		
Improvement and care of public grounds	15	19,538 38
Repairs, fuel, &c., Executive Mansion	11	16,807 24
Lighting, &c., Executive Mansion	11	11,304 12
Repairs to water-pipes and fire-plugs	11	1,174 10
Telegraph to connect the Capitol, Departments, and Government Printing Office	11	1,265 88
War, civil, miscellaneous.		
Salaries, office of superintendent State, War, and Navy Department building	4	84,899 36
Fuel, lights, &c., State, War, and Navy Department building	3	24,632 41

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
WAR DEPARTMENT—Continued.		
<i>War, civil, miscellaneous—Continued.</i>		
Building for State, War, and Navy Department	12	\$519,979 02
Building for Army Medical Museum and Library	8	4,734 00
Completion of the Washington Monument	15	41,917 01
Erection of monumental column, Yorktown, Va.	1	794 00
Increasing the water supply of Washington, D. C.	13	629,300 00
Transportation of reports and maps to foreign countries	8	8 35
Support and medical treatment of transient paupers	12	15,000 00
Maintenance of Garfield Hospital	2	3,748 30
Pedestal for statue of James A. Garfield	1	17 15
Erection of fish-ways at Great Falls	21	98,473 01
Monument at Washington's Headquarters, Newburgh, N. Y.	16	492 35
NAVY DEPARTMENT.		
Salaries:		
Office of the Secretary	4	55,184 00
Bureau of Yards and Docks	4	11,833 30
Bureau of Equipment and Recruiting	4	14,780 00
Bureau of Navigation	4	10,906 00
Office of Naval Records of the Rebellion	4	2,578 00
Nautical Almanac Office	5	24,333 00
Hydrographic Office	4	44,184 35
Contingent and miscellaneous expenses, Hydrographic Office	12	40,231 30
Salaries, Naval Observatory	4	17,945 00
Contingent and miscellaneous expenses, Naval Observatory	11	7,400 01
Salaries:		
Bureau of Ordnance	4	8,900 00
Bureau of Construction and Repairs	4	12,200 00
Bureau of Steam Engineering	4	12,440 00
Bureau of Provisions and Clothing	4	15,310 19
Bureau of Medicine and Surgery	4	9,400 00
Office of Judge-Advocate-General, United States Navy	4	6,400 00
Library, Navy Department	7	2,181 43
Contingent expenses, Navy Department	7	9,403 11
DEPARTMENT OF THE INTERIOR.		
Salaries, office of the Secretary	7	173,542 13
Publishing the Biennial Register	3	3,633 00
Stationery	8	64,216 44
Library, Department of the Interior	5	442 80
Rent of buildings	5	52,511 55
Postage to Postal-Union countries	5	2,635 00
Contingent expenses, Department of the Interior	8	61,613 40
Salaries, General Land Office	5	482,021 45
Expenses of inspectors, General Land Office	6	4,503 27
Library, General Land Office	5	307 00
Maps of the United States	2	1,722 50
Contingent expenses, General Land Office	4	1,041 70
Salaries:		
Indian Office	5	94,348 00
Pension Office	8	1,912,191 61
Investigation of pension cases, Pension Office	26	321,733 46
Salaries, special examiners, Pension Office	5	171,300 85
Investigation of pension cases, special examiners, Pension Office	67	134,042 56
Salaries:		
Patent Office	6	604,008 75
Bureau of Education	5	44,100 20
Library, Bureau of Education	6	800 00
Distributing documents, Bureau of Education	7	3,500 40
Collecting statistics, Bureau of Education	6	2,786 80
Salaries and expenses, Bureau of Labor	15	42,963 31
Salaries, Office of Commissioner of Railroads	5	14,213 30
Traveling expenses office of Commissioner of Railroads	3	1,139 34
Salaries:		
Office of Architect of Capitol	4	18,183 95
Office of Geological Survey	4	34,900 16
<i>Public buildings and grounds.</i>		
Reconstructing Interior Department building	5	41,683 87
Repairs of building, Department of the Interior	4	6,652 53
Annual repairs of the Capitol	5	45,077 63
Improving the Capitol grounds	8	45,464 78
Lighting the Capitol and grounds	8	33,784 00
Capitol terraces	5	142,323 26

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
DEPARTMENT OF THE INTERIOR—Continued.		
<i>Public buildings and grounds—Continued.</i>		
Ventilation, Senate	1	\$190 15
Senate stable and engine-house	2	800 00
Payment to George W. Cook, improving Capitol grounds	1	2,404 88
Fire-proof building for Pension Office	8	440,505 23
Heating apparatus, building for Pension Office	4	15,466 04
Penitentiary buildings, Territories of Dakota and Montana	20	43,275 45
Buildings and grounds, Government Hospital for the Insane	18	29,897 29
Additional accommodations, Government Hospital for the Insane	5	4,191 21
Buildings and grounds, Columbia Institution for the Deaf and Dumb	5	15,113 79
Buildings and grounds, Howard University	2	5,185 27
Maryland Institution for the Instruction of the Blind (permanent)	4	3,004 16
<i>Beneficiaries.</i>		
Current expenses:		
Government Hospital for the Insane	21	418,338 16
Columbia Institution for the Deaf and Dumb	4	38,559 00
Howard University	3	13,323 00
Support of Freedmen's Hospital and Asylum	7	48,487 56
<i>Public lands service.</i>		
Depreciations on public timber	7	61,879 13
Protecting public lands	7	73,461 45
Settlement of claims for swamp lands, &c	6	17,444 13
Reproducing plats of surveys, General Land Office	5	17,769 00
<i>Surveying public lands.</i>		
Surveying the public lands	7	22,792 28
Geological Survey	84	402,044 46
Protection and improvement of Yellowstone National Park	10	61,992 82
Protection and improvement of Hot Springs, Arkansas	4	18,352 38
<i>Indian affairs—miscellaneous.</i>		
Education of children in Alaska	4	7,929 89
POST-OFFICE DEPARTMENT.		
Salaries	5	694,138 26
Deficiency in the postal revenues	6	8,193,632 02
DEPARTMENT OF AGRICULTURE.		
Salaries	6	137,046 23
Salaries and expenses, Bureau of Animal Industry	27	53,580 75
Quarantine stations for neat cattle	5	17,900 95
Collecting agricultural statistics	7	58,181 59
Purchase and distribution of valuable seeds	6	96,885 21
Improvement of grounds	6	9,261 13
Experimental Garden	6	7,121 67
Laboratory	7	38,267 80
Museum	6	795 17
Library	6	1,502 45
Furniture, &c	6	4,658 12
Investigating history of insects injurious to agriculture	16	23,672 51
Report on forestry	7	6,017 78
Tim-culture	6	1,523 45
Sil-culture	7	22,070 03
Range	6	2,571 20
Contingent expenses	7	15,034 37
DEPARTMENT OF JUSTICE.		
Salaries	3	69,447 90
Contingent expenses:		
Furniture and repairs	10	2,702 20
Books for Department library	5	2,567 83
Books for office of solicitor	6	612 75
Stationery	8	4,005 20
Horses and wagons	11	1,593 56
Miscellaneous items	14	13,127 91
Building, Department of Justice	6	12,481 44
<i>Miscellaneous.</i>		
Ward of jail, District of Columbia	2	300 00
Expenses of Territorial courts in Utah	20	202,143 46

Accounts adjusted.	Number of accounts.	Amount.
DISBURSEMENTS—Continued.		
DEPARTMENT OF JUSTICE—Continued.		
Miscellaneous—Continued.		
Defending suits in claims against the United States	10	\$7, 985 05
Prosecution and collection of claims	1	75 00
Punishing violations of intercourse acts and frauds	12	4, 156 20
Prosecution of crimes	13	33, 461 27
JUDICIAL.		
Salaries:		
Justices, &c., Supreme Court	112	93, 500 00
Circuit judges	109	53, 785 72
District judges	671	203, 134 00
Retired judges	96	44, 006 30
District attorneys	260	19, 276 47
District marshals	234	12, 136 56
Justice and judges supreme court District of Columbia	72	24, 500 00
Salary and expenses, supreme court reporter (permanent)	6	6, 750 00
United States courts.		
Fees and expenses of marshals	565	735, 747 50
Fees of district attorneys	745	379, 202 00
Fees of clerks	617	226, 300 00
Fees of commissioners	1563	137, 039 00
Fees of jurors	399	512, 708 41
Fees of witnesses	601	721, 048 25
Support of prisoners	578	302, 881 18
Rent of court-rooms	313	55, 174 50
Miscellaneous expenses	653	301, 475 28
Support of convicts	8	837 75
Fees of supervisors of elections	14	23, 850 87
Judicial emoluments	142	701, 817 00
Miscellaneous.		
Relief of John Fraser	1	914 20
Relief of Lees & Ellis	1	10, 853 85
Relief of John A. Morris	1	117 10
Relief of Thomas F. Farnell	1	1, 000 00
Relief of Ida A. Richardson	1	20, 479 00
Relief of Cora A. Slocum and others	1	12, 714 40
Relief of Caroline A. Urquhart	1	5, 487 15
Accounts settled for an appropriation	26	2, 527 50
Total	24, 206	916, 703, 292 00
Number of certificates recorded.....		
		12, 967
Number of letters recorded.....		
		8, 501
Judiciary emolument accounts registered and referred		
		500
Number of powers of attorney for collection of interest on the public debt examined, regis-		
tered, and filed.....		2, 643
Requisitions answered		
		1, 373
* * * * *		

It gives me pleasure to especially commend the Hon. E. P. Baldwin, deputy auditor, and Chiefs H. K. Leaver, A. F. McMillan, J. P. Bentley and Thaddens Sturgis, and Acting Chief J. P. Torbert, the clerks and other employes of the Bureau for faithful, intelligent, and efficient service rendered.

Respectfully submitted.

JAS. Q. CHENOWETH,
First Auditor.

Hon. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF THE SECOND AUDITOR OF THE TREASURY.

TREASURY DEPARTMENT,
SECOND AUDITOR'S OFFICE,
Washington, October 27, 1886.

SIR: I have the honor to submit the following report of the operations of this office during the fiscal year which ended June 30, 1886, showing the disposition of moneys appropriated for certain branches of the military establishment and the Indian service, the work performed in each division of the office, and the condition of public business at the close of the year.

* * * * *

NEW CLASSES OF CLAIMS.

Several new classes of claims have been presented during the past fiscal year, chiefly under rulings of the Second Comptroller, by which a limited number of volunteer officers who were promoted from the ranks during the war of 1861-'65, and certain classes of enlisted men who served in that war, will receive bounty heretofore denied them upon what is now deemed an erroneous construction of law. The most important class, however, consists of claims of officers and ex-officers of the United States Army for a readjustment of their pay accounts since 1838, in which they shall be credited with whatever time they may have served as cadets at the West Point Military Academy or as enlisted men in the Army. These claims are based upon the acts of July 5, 1838 (5 Stat., 258), July 15, 1870 (16 Stat., 320), February 24, 1881 (21 Stat., 346), and June 30, 1882 (22 Stat., 118), and upon a recent judgment of the Court of Claims in the case of Capt. Malbone F. Watson, United States Army. As the Government has taken an appeal to the Supreme Court, it is not considered proper to comment on this new class of claims further than to say that at least 2,200 officers, or their legal representatives, are interested, and that the cost of readjusting the pay accounts of officers who have served since 1838, on the basis claimed by Captain Watson, would probably be not less than \$1,500,000. Up to this date 380 claims have been filed, but no action has been taken thereon. The prosecution of these claims, many of which accrued nearly half a century ago, is a striking illustration of the necessity of a statute of limitations.

REHEARINGS.

By a rule adopted last November, applications of disbursing officers and claimants for rehearings after their cases have been formally disposed of are required to be made to the Auditor, whose decisions thereon are certified to the Second Comptroller, with the papers, for final action. No record has been kept of the number of these applications, but the work involved is sufficient to occupy the entire time of an experienced clerk, and is rapidly increasing.

WOEN-OUT MUSTER AND PAY ROLLS.

On representations made by this office as to the condition of a large number of muster and pay rolls, an appropriation of \$21,000 was pro-

vided in the legislative, executive, and judicial act, approved July 31, 1886, "for the purpose of restoring and repairing the worn-out and defaced rolls in the Second Auditor's Office."

At present only such rolls as can no longer be used are taken in hand. The work of copying these rolls is necessarily slow, owing to the difficulty of deciphering some portions that are practically illegible and of supplying other portions that are missing; but, notwithstanding these drawbacks, fair progress is being made. In view of the importance and extent of the work, there being more than 50,000 rolls that should be copied with as little delay as possible, I felt justified, when submitting my estimate for the fiscal year 1887, in asking for a continuance of the special appropriation of \$21,000.

THE CLERICAL FORCE.

In my report for 1885 I expressed the opinion that "the efficiency of the force can be increased and maintained only by the prompt removal of clerks who are incompetent from any cause, by the appointment of none but active, intelligent, well-educated men whose honesty and integrity are above suspicion, and by the promotion and encouragement of the most efficient and meritorious." In consonance with that opinion, I have had to recommend the removal of a number of clerks of the classified service, and have selected new men from among those certified for appointment under the civil-service rules. It is but just to say that the civil-service appointees generally appear to be men of intelligence and capacity, who will undoubtedly make excellent clerks as soon as they have acquired the technical knowledge and expertness which can be gained only by experience and practice. The clerks as a body are entitled to commendation for faithfulness and industry.

Very respectfully,

WM. A. DAY,
Auditor.

The SECRETARY OF THE TREASURY.

REPORT OF THE THIRD AUDITOR OF THE TREASURY.

TREASURY DEPARTMENT,
THIRD AUDITOR'S OFFICE,
Washington, D. C., November 1, 1886.

SIR: I have the honor to transmit herewith the annual report of this office showing the business transacted during the fiscal year ended June 30, 1886.

In submitting this report, it affords me great pleasure to direct your attention to the improved condition of the business, as disclosed in the operations of the several divisions, compared with the preceding fiscal year.

The total number of claims, accounts, and cases settled and disposed of during the fiscal year ended June 30, 1886, was 13,636, involving \$159,401,724. During the preceding fiscal year the number was 8,919, involving \$91,578,605—an increase of about 53 per cent. in the number of claims, &c., disposed of, and about 74 per cent. in the money involved, over 1884-'85.

ARMY PENSION DIVISION.

In the pension division it will be observed that there is a decided improvement. At the close of the last fiscal year the accounts of pension agents remaining on hand amounted to \$45,222,434.22. During the present fiscal year this amount was reduced to \$12,446,349.03. The business of the division is substantially up, and the clerks are now engaged on current work.

This division has charge of the settlement of the accounts of Army pension agents and the adjustment of all matters relating to the payment of Army pensions.

In order to adjust these accounts properly it is necessary to keep an account with each pensioner from the time when the name is placed on the pension-rolls until his or her pension ceases by death or otherwise. This office, has, therefore, the record of all payments to pensioners from March 4, 1789, and the vouchers and receipts for each separate payment from July 1, 1818, the date when by authority of the act of April 9, 1818, the disbursements were placed under the control of the Secretary of War (instead of the Secretary of the Treasury), and the adjudication of the accounts transferred from the First to the Third Auditor. The vouchers and accounts prior to that time were in the custody of the Register of the Treasury, and have been destroyed. A portion of them were burned by the British in 1814, the remainder in the Treasury fire in 1833.

The records of payments, covering the unbroken period from March 4, 1789, are contained in 323 large volumes, of which 299 have been opened since 1862, and 118 are in current use. This office is notified by the Commissioner of Pensions of the issue of each pension certificate, or any change in the status of pensioners already on the rolls, and the facts are at once entered.

The original rolls turned over in 1819 contained 5,455 names (Revolutionary pensioners), and the amount expended during that year was \$972,360.67. The rolls in 1861 contained 12,807 names (War "12," Indian-Mexican War pensioners), and the amount expended during that year was \$1,032,768.22. The amount required to pay pensioners had increased to \$28,000,000 annually in 1879, prior to the passage of the "Arrears" act, and to \$64,300,000 the past year, while it is estimated that \$75,000,000 will be required the present year, so rapidly is the roll increasing.

* * * * *

STATE WAR CLAIMS.

The investigation and settlement of State war claims include all claims filed in this office by the several States and Territories under various acts and resolutions of Congress for the costs, charges, and expenses incurred by them for enrolling, subsisting, clothing, supplying, arming, equipping, paying, and transporting their troops employed in aiding to suppress the late rebellion against the United States, 1861-'65, and all cases arising out of Indian hostilities and border invasions.

The following statement shows the condition of war claims, by States, from April 14, 1861, to June 30, 1886:

Name of State.	No. of claims filed.	Amount of claims filed.	Amount of claims allowed.	Amount of claims suspended and disallowed.	Amount of interest included in claims filed.
Maine.....	6	\$1,831,010 64	\$1,027,185 00	\$303,825 04	.....
New Hampshire.....	9	1,412,501 11	1,010,815 53	401,775 59	.....
Vermont.....	13	934,735 20	857,845 10	66,890 10	.....
Massachusetts.....	10	4,842,527 03	3,812,521 07	530,005 96	.....
Rhode Island.....	4	702,011 99	767,404 19	5,307 80	.....
Connecticut.....	11	2,291,135 03	2,154,447 20	136,687 83	941,363 38
New York.....	9	5,102,021 32	4,022,966 53	1,079,054 79	181,188 08
New Jersey.....	11	1,435,744 41	1,392,974 80	42,769 55	.....
Pennsylvania.....	13	3,538,886 17	3,210,971 60	327,914 48	.....
Delaware.....	2	78,185 83	31,088 06	40,196 87	.....
Maryland.....	4	170,126 40	183,140 89	43,935 50	.....
Virginia.....	2	54,089 41	48,469 97	5,619 44	.....
West Virginia.....	1	456,879 03	456,658 03	221 00	.....
Kentucky.....	15	4,794,715 90	3,415,344 40	1,379,371 50	978,701 05
Ohio.....	25	3,044,574 84	3,267,654 60	677,020 24	452,347 39
Michigan.....	9	1,203,751 34	846,087 76	357,663 58	330,487 01
Illinois.....	7	4,574,298 51	4,045,605 48	528,793 03	433,112 08
Wisconsin.....	9	1,141,793 81	1,046,770 80	95,023 01	.....
Indiana.....	11	3,410,230 38	2,593,788 06	816,450 40	604,899 41
Minnesota.....	11	444,986 91	435,671 73	9,315 18	.....
Iowa.....	8	1,094,513 94	1,068,748 29	25,765 65	.....
Missouri.....	4	10,094,949 96	7,455,421 43	2,639,528 53	.....
Nebraska.....	3	73,448 37	52,052 51	21,395 86	.....
Kansas.....	3	820,131 57	716,983 10	103,148 47	.....
Nevada.....	3	373,113 11	.....	372,113 11	329,307 37
Oregon.....	2	430,727 27	70,268 08	360,459 19	.....
California.....	1	4,441 33	4,142 82	298 51	.....
Colorado.....	1	55,238 84	55,238 84	.....	.....
Total.....	207	54,878,408 37	43,966,967 91	10,307,480 36	3,188,307 08

The State of Missouri filed a claim December 21, 1874, under act of Congress approved April 17, 1866, for the sum of \$2,382,132.67. This claim has been conditionally assumed, but not paid by the State. I am unable to find any authority for the settlement of the same.

Eight States have filed claims for a refund of interest.

The States of Nevada and Oregon have filed claims for expenses incurred in suppressing Indian hostilities, under act of Congress approved June 27, 1882, aggregating \$741,572.30. These claims have been referred to the Secretary of War for his action.

During the fiscal year ending June 30, 1886, but one clerk has been employed in the settlement of State claims, and he only for a period of five months, beginning February 1, 1886. Seventeen cases have been disposed of, involving \$917,896.19, out of which sum \$63,131.72 was allowed the States of New York, Massachusetts, Pennsylvania, Ohio, and Nebraska.

I have found that these claims generally are of long standing, and it is my purpose to finally dispose of them during the present fiscal year, at least such of them as relate to the war of the rebellion.

While a full investigation has not been completed touching these claims, yet a cursory examination unfolds gross irregularities, arising out of absolute carelessness or willful perpetration of fraud. To illustrate in detail, I found, after a thorough examination of the claims of the State of Indiana, that, in round numbers, \$98,000 had been illegally allowed. The records of this office show that \$52,000 of this sum were in the year 1874 discovered and withheld from a credit found due the State; and, upon investigation now, \$46,000, made up from accounts

allowed in excess of the vouchers presented, amounts allowed twice for the same service, and amounts allowed without vouchers, appear as a legitimate charge against the State.

In the matter of the claims of the State of Vermont, it appears that, for want of a proper system in keeping the accounts, large sums, amounting in the aggregate to \$225,254.29, have been, at various times since the close of the rebellion, paid the State, which, instead should have been applied to an indebtedness amounting to \$543,780.23, a charge against the State of Vermont on the books of the ordnance office of the War Department, being the money value of arms, equipments, &c., furnished by the United States during the years 1863 and 1864, which have never been returned or accounted for. I am informed that the State sold the greater portion of these arms, &c., to a foreign country, and deposited the proceeds, amounting to about \$170,000, in her treasury.

At this time the claims of the State of Iowa are receiving attention, but the examination is not sufficiently advanced to include a full report.

I am, however, warranted in stating that a considerable sum has been unlawfully paid the State growing out of reimbursements on account of advances to troops, the same service having been previously paid for by a United States paymaster.

It is at present uncertain what a complete investigation may develop with reference to the claims of the States generally, other than those claims already examined, but I shall continue the work until the whole field has been thoroughly explored.

On the 8th of June last a circular letter was addressed to the governors of the several States, requesting the presentation of further evidence, if it should be contemplated to offer any, in reply to outstanding differences, and asking final settlement of the claims in question.

* * * * *

Very respectfully,

JNO. S. WILLIAMS,
Third Auditor.

Hon. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF THE FOURTH AUDITOR OF THE TREASURY.

TREASURY DEPARTMENT,
FOURTH AUDITOR'S OFFICE,
Washington, October 20, 1886.

SIR: I have the honor to submit the annual report of the work of this Bureau for the fiscal year ending June 30, 1886.

During the year considerable gain has been made upon the work on hand; the number of claims unsettled has been greatly reduced and the accounts of disbursing officers are now taken up for examination and statement almost as soon as received. A reference to the tabulated reports of the work done by the several divisions shows gratifying results in this regard.

* * * * *

BALANCES AND LIABILITIES UNDER PAY OF NAVY AND MARINE CORPS.

The following table shows the balances available on June 30, under "Pay," and also the ascertained liabilities under same appropriations. The most of this has been liquidated since the close of the fiscal year, although there remains a considerable sum due and unpaid to officers and men, which will further diminish the balances of the appropriations shown as available:

*Statement of appropriations, pay of Navy and pay of Marine Corps.***PAY OF NAVY.**

Balance in hands of disbursing officers June 30, 1886.....	\$113,793 80
Balance in Treasury, as shown by ledger, June 30, 1886.....	1,815,692 94
Total balance	1,929,486 13
The liabilities June 30, 1886, were as follows:	
Amount due and unpaid officers and men	\$1,085,362 94
Amount due Naval Hospital fund.....	30,185 62
Amount due clothing Navy	51,651 79
Amount due small-store fund	21,414 45
Amount due general account of advances	480,953 08
Total liability	1,669,567 88
Available balance June 30, 1886.....	259,918 25

PAY OF MARINE CORPS.

Balance in hands of disbursing officer June 30, 1886.....	29,627 28
Balance in Treasury, as shown by ledger, June 30, 1886.....	290,339 74
Total balance.....	319,967 02
The liabilities June 30, 1886, were as follows:	
Amount due and unpaid officers and men	\$71,143 20
Amount due general account of advances.....	31,433 01
Total liability	102,576 21
Available balance June 30, 1886	217,390 81

EXCHANGE.

Bills of exchange were sold by the pay officers of the Department of the Navy during the year to the amount of \$1,689,154.79. Of this sum \$1,417,974.89 was drawn on the Navy agents, London, and \$271,179.90 on the Secretary of the Navy.

* * * * *

ACCOUNTABILITY FOR PUBLIC PROPERTY.

I deem it my duty to again urge that some system of property accountability be instituted by which an audit of the accounts of officers in charge of public property may be had by the accounting officers.

In the last annual report attention was called to this matter, and the necessity for a rendition and examination of property returns of the Navy, similar to that provided by law for the Army, was endeavored to be shown; and now, in view of the increased appropriations for the construction of new ships and their fitting out for service, the necessity for an accounting for property purchased may, and probably will, be more imperative. The words of the statute (sec. 277, R. S., par. 5), giving the Fourth Auditor jurisdiction over all "accounts" accruing

in the Navy Department, seem so plain that no longer delay should be permitted in putting the statute in force to the full extent; but if it is held that the statute refers only to money accounts, it would seem proper to call the attention of Congress to the subject, that the necessary legislation be had.

I have the honor to be, sir, your obedient servant,

O. M. SHELLEY,
Auditor.

Hon. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF THE FIFTH AUDITOR OF THE TREASURY.

TREASURY DEPARTMENT,
FIFTH AUDITOR'S OFFICE,
Washington, October 28, 1886.

SIR: In compliance with your instructions of August 25, 1886, to make a report of the transactions of this office during the past fiscal year, ended June 30, 1886, and of the present condition of the public business intrusted to my charge, I have the honor to append hereto the usual tables showing the results in detail of adjustments of accounts, and to report that during the year 10,835 accounts were settled in this office, involving the amount in footings of \$810,588,210.81 and the examination of 272,191 vouchers; 8,271 reports were copied, 6,049 letters written, and 32,175 coupon-books of internal-revenue stamps were scheduled and counted.

DIPLOMATIC AND CONSULAR DIVISION.

Diplomatic service.—The accounts adjusted of ministers and other officers of the diplomatic service (Table A) show the following expenses:

Salaries of ministers and chargés d'affaires.....	\$295,514 82
Salaries of chargés d'affaires <i>ad interim</i>	23,905 04
Salaries of secretaries of legations, interpreters, and legation clerks.....	45,734 39
Contingent expenses foreign missions.....	59,339 14
Loss on bills of exchange.....	1,170 08
	<hr/>
	425,663 47
Passport fees received and accounted for.....	4,235 27

Consular service.—Accounts of consular officers have been adjusted showing expenses for this service and official fees collected as follows (Tables B, C, D, E, and F):

Salaries consular service.....	\$435,589 25
Salaries consular officers not citizens.....	8,664 72
Loss on bills of exchange.....	3,738 40
Pay of consular officers for services to American vessels and seamen	17,651 97
Compensation from fees (sections 1703, 1730, and 1733 Revised Statutes).	199,418 82
Office rent and clerk hire (section 1732, Revised Statutes).....	6,815 92
Contingent expenses, United States consulates.....	144,900 91
Allowance for clerks at consulates.....	56,253 20
Expenses of prisons for American convicts.....	6,062 08
Salaries interpreters to consulates in China and Japan.....	11,532 93
Salaries marshals for consular courts.....	6,874 98
Expenses of interpreters, guards, &c., in Turkish dominions.....	2,850 80
Boat and crew for consul at Osaka and Hiogo.....	250 92
	<hr/>
Total.....	900,604 90
Consular fees received for official services.....	881,569 79
	<hr/>
Excess of expenditures over receipts.....	19,035 11

The expense for "salaries consular service," as shown above, is in excess of the appropriation by \$4,989.25. This is owing to payments of salary to consular officers while receiving instructions and making transit to and from their posts, not especially provided for by the appropriation. These payments are exhibited in detail in a separate column in Tables B and C. They amount to \$26,721.12. Of the regular salaries \$22,000 are either unadjusted or have lapsed.

The amount reported last year as paid for services to American vessels, \$15,511.73, was increased by settlements afterwards made to \$21,617.91. The amount for this year will also be augmented by settlements yet to be made of some accounts awaiting perfection.

Consular fees.—The fees collected during the fiscal year amounted to \$881,569.79, and were in kind and amount as follows:

Invoice certificates.....	\$788,501 75
Landing certificates	35,125 00
Bills of health	16,306 80
Currency certificates.....	15,165 00
Certificates of returned goods, packages, &c.....	5,555 14
Other fees	20,916 10

Table I presents in detail, according to consular districts, the sources from which the fees were derived.

For 1885 the fees were reported at \$791,345.43. An increase is shown for 1886 of \$90,224.36, which arises from the one source of *certificates to invoices*, a greater number having been certified than for any previous year.

It is worthy of comment that notwithstanding the very considerable decrease in the tariff of fees in 1881, and the abolishment of charges for services to American vessels in 1884, the fees now reported are greater than for any year before 1881, and fall very little short of the receipts for any year since.

Relief of seamen.—As shown in Tables G and H, accounts for relief and extra and arrears of wages of seamen were adjusted as follows:

Board and lodging	\$8,559 47
Clothing	5,293 95
Medical aid.....	5,850 64
Passage to the United States (paid at Treasury).....	6,420 90
Other expenses	6,953 17
<hr/>	
Total disbursed for relief of seamen.....	33,077 43
Loss by exchange on drafts for relief of seamen	153 03
<hr/>	
Arrears of wages collected.....	212,848 28
Extra wages collected.....	3,969 78
<hr/>	
	216,818 06
Extra and arrears of wages paid to seamen.....	180,150 13
<hr/>	
Excess of wages collected over amount paid seamen.....	36,667 93

Although the excess of extra wages and arrears collected over the amount paid to seamen is shown to be \$36,667.93, this sum has not been received into the Treasury. About \$29,167 of the amount are claimed to have been paid to seamen, but remain charged to consular officers, awaiting proper vouchers. The balance, about \$7,500, was applied to the payment of the expenses of the seamen to whom the wages belonged. These expenses form a part of the total amount shown to have been expended for relief, namely, \$33,077.43, and should be deducted therefrom, in order to ascertain the actual expenditure from the appropriation, showing about \$25,577.43 actually paid from the

Treasury for relief of seamen. In consequence of suspended vouchers, the exact figures which will appear on final adjustment cannot be given.

The actual cost to the Government in 1885 was reported at \$20,293.42.

A greater number of seamen were relieved during the year than during the year 1885, and a larger number were shipwrecked, and the expenses necessarily have been greater, while the difficulties in collecting wages in cases of shipwreck have diminished the resources for relief; 1,235 seamen were relieved, as against 1,173 in 1885; 821 were shipwrecked, as against 650 in 1885.

Only 51 deserters received relief, and the most of these were reported as having deserted their vessels because of cruel or harsh treatment. As compared with other years, it indicates that more than ordinary care has been exercised by consular officers in providing for this class of seamen.

The diminution in the extra wages and increase in the arrears of wages as compared with 1885 are due to a more general enforcement of the shipping act of June 26, 1884.

Returns by collectors.—The work of adjusting the monthly returns of collectors of customs received under section 4213 of the Revised Statutes has been performed in this division, and comparisons have been made with consular reports of official fees and charges. It is perhaps sufficient to say that the purpose of the statute, namely, the proving of consular returns of fees, is satisfactorily accomplished by the work.

Alabama judgments.—There were received January 5, 1886, 9,176 Alabama judgments of the second class. The interest was at once calculated on them, constituting about one-third of the work connected with them in this office. They could not be finally passed, however, before the closing of the office of the Court of Commissioners of Alabama Claims, June 30, 1886, without additional legislation. The act of June 2, 1886, provided for their passage, but this was too late to receive the estimates necessary and to finally settle and pay any of the judgments within the fiscal year embraced in this report.

Other expenses of the foreign service.—During the year other accounts relating to the foreign service have been adjusted as follows:

Salaries and expenses, Court of Commissioners of Alabama Claims	\$65,409 59
Payment of judgments, Court of Alabama Claims.....	3,932 97
Commission to Central and South America	32 50
International Bureau of Weights and Measures, 1886	1,969 04
Scientific Commission of Electricians at Philadelphia, Pa.....	101 40
Transporting remains of ministers and consuls to their homes for interment	2,568 74
Extending commerce of the United States in the Congo Valley.....	13,852 35
Refunding penalties or charges erroneously exacted	1,608 26
Rescuing shipwrecked American seamen, 1886	156 00
Bringing home criminals, 1886.....	122 30
Foreign hospital at Panama, 1886	300 00
Allowance to widows or heirs of diplomatic or consular officers who die abroad, 1886	1,097 22
Annual expenses, Cape Spartel light, coast of Morocco.....	289 50
Emergencies arising in the diplomatic and consular service.....	735 17
Steam-launch for legation and consulate at Constantinople, 1886	640 23
Procuring evidence relating to French spoliation claims	4,812 47
Preventing the spread of epidemic diseases	1,023 84
Conference of the Red Cross Association at Geneva	397 37
Allowance to Edwin Stevens, late consul at Ningpo (act June 25, 1886)..	730 00

INTERNAL-REVENUE DIVISION.

The total collections of internal revenue during the fiscal year 1886, as shown by the adjustment of collectors' accounts and exhibited in

detail in Table K, amounted to \$116,807,500.00. Included in this amount \$1,182.17 belongs to the collections of the previous year.

The disbursing accounts of collectors of internal revenue as adjusted for the fiscal year aggregate \$3,522,757.11, inclusive of amounts allowed storekeepers and gaugers. These expenses are given in detail in Appendix L, page 681.

Of this total expense the sum of \$16,329.77 belongs to previous fiscal years, being commissions paid on tax-paid spirit-stamps sold.

The following exhibit shows by States for what these expenses were incurred:

District.	Compensation of collector.		Rent, fuel and lights.	Stationery and other expenses.	Compensation of storekeepers.	Compensation of gaugers.	Total expenses of collecting.
	Salary.	Deputies and clerks.					
Alabama.....	\$2,788 30	\$14,847 45	.....	\$329 88	\$1,154 00	\$2,034 98	\$22,154 11
Arkansas.....	2,750 00	10,724 40	.....	353 63	11,182 50	1,379 36	26,390 89
California.....	8,464 96	40,837 00	\$1,273 30	1,929 07	14,444 00	23,967 49	66,475 83
Colorado.....	4,980 00	10,533 87	1,000 00	120 39	88 00	1,405 08	16,136 31
Connecticut.....	4,177 00	10,269 80	300 00	201 66	2,504 00	5,810 72	20,263 28
Delaware.....	3,032 13	7,295 40	285 00	63 43	730 00	1,222 14	12,628 10
Florida.....	3,000 00	8,735 54	597 28	98 93	.....	.....	12,431 75
Georgia.....	4,590 48	20,614 78	.....	304 33	21,297 00	3,344 18	71,150 67
Idaho.....	.....	730 89	.....	.....	.....	.....	730 89
Illinois.....	25,634 00	80,867 43	2,138 71	1,252 44	92,731 00	90,482 33	292,105 91
Indiana.....	11,874 97	34,482 11	1,409 32	821 66	30,835 00	24,056 01	103,563 07
Iowa.....	9,875 44	24,325 83	1,420 72	677 02	7,164 00	8,130 11	51,605 12
Kansas.....	2,981 45	11,853 58	.....	190 43	2,021 50	93 19	17,140 15
Kentucky.....	29,980 83	102,344 52	2,780 19	2,739 07	356,927 00	139,546 47	627,331 06
Louisiana.....	3,766 00	23,424 20	.....	209 13	.....	3,976 46	30,859 79
Maine.....	2,375 00	4,675 55	.....	69 28	.....	.....	7,119 83
Maryland.....	4,500 00	24,229 63	700 00	525 63	22,451 00	25,364 73	102,770 96
Massachusetts.....	8,504 67	31,738 82	508 24	690 05	23,124 00	18,866 34	82,949 19
Michigan.....	7,375 00	27,375 80	1,175 52	343 06	.....	2,094 16	36,263 54
Minnesota.....	3,625 00	15,144 02	.....	248 51	.....	1,712 73	30,727 26
Mississippi.....	2,750 00	11,473 74	254 25	170 62	.....	.....	14,658 61
Missouri.....	12,687 40	49,070 10	710 50	1,040 59	22,837 50	26,836 96	132,575 15
Montana.....	3,001 86	11,588 25	690 56	128 79	416 50	150 50	16,966 46
Nebraska.....	4,500 00	10,968 40	.....	268 27	5,140 00	5,388 34	27,265 09
Nevada.....	2,750 00	6,248 12	603 25	198 89	.....	.....	9,800 26
New Hampshire.....	3,977 27	4,580 05	.....	108 67	1,408 00	872 86	10,946 85
New Jersey.....	12,665 45	30,064 06	930 00	459 78	2,690 00	7,090 97	63,712 26
New Mexico.....	2,750 00	8,530 09	609 40	183 97	.....	963 71	13,147 17
New York.....	32,320 50	171,622 31	10,919 88	2,269 36	12,822 00	66,630 94	396,484 99
North Carolina.....	13,161 84	92,436 78	1,336 65	1,506 43	109,249 50	90,123 64	243,863 86
Ohio.....	21,901 08	80,210 85	2,603 60	1,410 47	69,693 00	82,977 41	268,279 31
Oregon.....	3,000 00	10,784 76	.....	226 79	930 00	1,181 28	16,001 83
Pennsylvania.....	24,631 67	123,020 86	3,507 15	2,600 58	94,911 50	60,709 67	308,441 78
Rhode Island.....	2,750 00	5,590 48	.....	106 87	.....	722 30	8,169 65
South Carolina.....	3,172 29	10,944 31	.....	217 27	5,576 50	1,177 61	27,082 48
Tennessee.....	7,125 00	35,636 38	.....	704 63	44,893 50	17,847 54	106,296 45
Texas.....	7,625 00	27,000 67	1,230 55	556 46	2,331 00	3,593 86	43,243 54
Vermont.....	2,125 00	4,092 41	183 99	42 73	.....	.....	6,444 13
Virginia.....	13,218 60	84,710 01	1,420 34	1,683 99	28,831 06	29,430 60	154,464 59
West Virginia.....	4,862 14	10,690 44	398 06	564 95	6,114 00	7,099 89	25,723 48
Wisconsin.....	13,381 67	31,351 12	878 33	649 92	13,861 00	10,674 24	70,796 13
Total.....	329,723 25	1,393,813 93	40,296 69	26,182 43	1,025,370 50	705,870 81	3,632,757 11

Although since the time covered by this report the adjusting of the Alabama claims put additional work upon this office, occupying the greater part of the clerical force from July 3 to August 10, the business of the Bureau is not in arrears, owing to a commendable industry and zeal of some of the most efficient clerks, who devoted many of their evening hours to the public business.

I have the honor to be, very respectfully, your obedient servant,

ANTH. EICKHOFF,

Auditor.

Hon. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF THE SIXTH AUDITOR OF THE TREASURY.

OFFICE OF THE AUDITOR OF THE TREASURY
FOR THE POST-OFFICE DEPARTMENT,
Washington, D. C., November 9, 1886.

SIR: I have the honor to submit herewith the report of the business operations of this office for the fiscal year ended June 30, 1886. The financial transactions of the Post-Office Department during the last fiscal year are exhibited in detail in the annual report to the Postmaster-General submitted this date.

During the past fiscal year, for the first time since the establishment of the money-order system, quarterly reports of the money-order business have been made, as contemplated by law. Fully twenty persons of the force of this office have been engaged during the past fiscal year in disposing of the money-order work accumulated in prior years, arranging it in proper shape, and rendering it available for the intelligent transaction of the business of the office.

In May, 1885, after careful scrutiny of the quarterly returns of fourth-class postmasters, I was convinced that, in many instances, false reports of cancellations had been made, and the compensation of the postmasters making such false returns thereby illegally increased. As many of the returns for the first quarter of 1885 had already passed the examining division, it was impracticable to make a thorough examination at that time, but during the fiscal year ended June 30, 1886, close attention was given to this subject, and the result has been the discovery that this practice has not been confined to any particular locality or section, but has been widespread, and has involved the business of the several fiscal years since 1879. Report was made to the Postmaster-General in each case where the returns indicated a false statement of cancellations. To July 1, 1886, the cases of one hundred and thirty postmasters had been acted upon by the Postmaster-General. These cases showed an excess of compensation of \$58,267.82, illegally retained by said postmasters, of which sum upwards of \$12,000 has already been collected by this office. Four hundred additional cases are yet in the hands of the officers of the Post-Office Department, in process of investigation. The performance of this duty has largely increased the clerical labor of this office, as all the quarterly returns of the fiscal years involved in each case had to be examined in the most careful manner, and a large number of abstracts and transcripts prepared for the information and use of the Post-Office inspectors and United States attorneys in prosecuting the offenders.

Very respectfully,

D. McCONVILLE,
Auditor.

Hon. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF THE REGISTER OF THE TREASURY.

TREASURY DEPARTMENT, REGISTER'S OFFICE,
Washington, D. C., October 30, 1886.

SIR: I have the honor to report concerning the operations of the past fiscal year in this Office of your Department, as follows, viz:

• • • • •

Security of existing files, &c., against fire-risks, dust, and insects demands that all present and future files should be put in suitable sheet-metal file-boxes.

Provision and orders for this should be made as soon as practicable.

The necessity of providing files-room for the future is obvious to the most casual inspection in almost all of the Departments, and it is to be hoped ere long will lead Congress to provide for a scientifically planned fire-proof hall of records.

But the current work in each Department will always demand the retention of large numbers of the more recent books and files. In view of this I renew the suggestions made in my annual report for 1885, viz:

(1) That the areas of the two courts of this building be occupied by fire-proof, thoroughly ventilated, and top-lighted file-rooms, having floors level with sub-basement floor, and the roofs not to exceed a foot above the level of the present grass surface.

(2) That filing without folding, which saves 20 per cent. of space and is much more easy of reference, should be practically considered by a proper board, required to recommend the sizes of paper and margins to be left best adapted for official use, so as to combine economy of material, work, and space with simplicity and completeness of form for binding and filing.

The files-rooms in the Register's custody demonstrate the propriety of this, by the tons of paper, great rolls of immense sheets with not enough on each to fill a half page of foolscap, which must be thrust into holes of arbitrary sizes, to which the folding or rolling must be adapted. Nor would saving of files space be the only economy. The reduction of the weight of paper yearly used in the public offices of the Government would exceed 25 per cent. of the annual cost of stationery.

It would not be just to close this report without saying in it that for the exceptional record of economy and efficiency exhibited in the operations of this office during the past fiscal year, as well as for valuable suggestions of improvements, I am largely indebted to the comprehensive and varied knowledge and long years of experience in the accounting of the Treasury Department, and to the intelligence, zeal, and devotion to duty of my able and indefatigable assistant, Maj. Roswell A. Fish.

Very respectfully, your obedient servant,

*W. S. ROSEORANS,
Register.*

*Hon. DANIEL MANNING,
Secretary of Treasury.*

REPORT OF THE CHIEF OF THE DIVISION OF CUSTOMS.

*TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
Washington, D. C., November 29, 1886.*

SIR: I have the honor to inform you that during the season of 1886 the Alaska Commercial Company took 99,980 fur-seal skins, and shipped the same to San Francisco, where the tax was paid, the tax being paid upon the number of skins as appeared by the count at the time of the shipment from the Seal Islands, and not, as has been the practice heretofore, upon the count as made after their arrival at San Francisco.

The Alaska Commercial Company has paid its annual rental up to the 1st of May, 1886, and, so far as known, has otherwise conformed to the conditions of its lease.

Respectfully, yours,

JOHN G. MACGREGOR,
Chief of Customs Division.

Hon. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF THE CHIEF OF THE DIVISION OF SPECIAL AGENTS.

TREASURY DEPARTMENT, OFFICE OF THE SECRETARY,
Washington, D. C., November 18, 1886.

SIR: I have the honor to submit the following report of the results of the work of the Division of Special Agents of the Treasury Department for the fiscal year ended June 30, 1886:

Money paid into the Treasury.

On account of seizures.....	\$9,118 90
Fines and penalties	3,602 15
Suits	4,093 93
Duties.....	572,376 62
Miscellaneous.....	3,545 36

Total.....\$592,736 96

Number of suits brought.....	9
Amount involved	\$29,639 82
Number of seizures.....	280
Appraised value of seizures.....	\$64,995 13
Duties on seizures	\$8,562 72
Reduction in expenses recommended	\$184,663 93
Number of reports received.....	4,149

Of these reports, 115 relate to smuggling, 263 to undervaluations, 82 to misconduct of customs officers, 231 to seizures, 115 to inspection of customs districts, 13 to arrests made, 21 to suits commenced, and 3,309 to miscellaneous subjects.

The cost of the service for the last fiscal year as compared with the year 1885 is as follows:

Year.	Special agents.	Inspectors.	Frond-roll employes.	Total.
1885.....	\$87,466 42	\$52,672 02	\$69,807 14	\$210,005 58
1886.....	76,570 65	49,770 66	12,811 97	139,153 28
Total reduction.....				\$70,852 30

The reports of examinations of the several customs districts and special reports made from time to time show a general improvement in the methods of business and the discipline of the service.

Careful attention is generally given to the details of current transactions by the heads of departments, resulting in the correction of many minor irregularities and increased efficiency in administration. A comparison of the receipts and expenses of each customs district

for the last fiscal year with those of the previous fiscal year shows that, while the revenues have increased at nearly all of the important ports, the expenses have in most cases been reduced, and that an aggregate reduction of \$568,575 was made in the expenses of these districts during the last fiscal year.

The accompanying statement, No. 1, shows the number of employes and the expenses of collection in each customs district for the fiscal years 1885 and 1886.

Statement No. 2 shows the business transacted in each customs district, including receipts and expenses and value of exports.

Statement No. 3 shows the number of packages, with the invoice value and estimated duties thereon, forwarded without appraisement from and to the ports specified in the act of June 10, 1880, and acts amendatory thereof.

Statement No. 4 shows the actual quantities and classification of sugars imported at the several ports during the last fiscal year.

I am, very respectfully,

L. G. MARTIN,
Supervising Special Agent.

Hon. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF THE CHIEF OF THE DIVISION OF REVENUE MARINE.

TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
Washington, D. C., November 1, 1886.

SIR: I have the honor to make the following report in relation to the Revenue Marine:

The performance of the regular duties of this Service has been continued with fidelity, energy, and freedom from disaster.

Thirty-eight vessels, carrying a complement of 995 officers and men, have been employed during the past year. The following is a statistical statement of their work:

Aggregate number of miles cruised by vessels.....	344,681
Number of merchant vessels boarded and examined.....	28,304
Number of merchant vessels found violating law in some particular and seized or reported to proper authorities.....	1,638
Fines or penalties of vessels so seized or reported.....	\$651,199.07
Number of vessels in distress assisted.....	313
Value of vessels and their cargoes imperiled by the sea to which assist- ance was rendered.....	\$6,738,569.00
Number of persons on board vessels assisted.....	2,888

One hundred and fifty-four persons were picked out of the water and saved from drowning.

In addition to the efficient guarding of the coasts of the United States, various special duties have been executed in a highly creditable manner.

The revenue-marine steamer "Rush," commanded by Captain Hooper, was dispatched from San Francisco January 2, 1886, in search of the whaling bark Amethyst, reported lost, or in need of succor, in the ice in Behring Sea, and cruised for more than six weeks, covering a distance of 6,475 miles on this mission.

Under the command of Captain Healy, the Revenue-Marine steamer Bear left San Francisco in May, visiting Ounalaska, the Pribylov

Islands, and proceeding as far north as Point Barrow, in the Arctic Ocean. On her return, Lieutenant Stoney, United States Navy, and his exploring party, were received on board at Hotham Inlet, by request of the Navy Department. Twenty-five miners, without means of transportation, and two seamen from the whaling fleet in need of medical treatment, were also brought down from St. Michael's.

Since the return of the Bear to San Francisco, in October, the result of her explorations seems to leave no hope of the survival of the Amethyst or any of her company.

Under special orders to cruise in the waters of Alaska, and principally in the vicinity of the Seal Islands, the Revenue-Marine steamer Corwin, under the command of Captain Abbey, put to sea June 10, 1886. July 17 seizure was made of the schooner San Diego, and August 1 and 2 of the schooners Thornton, Carolena, and Onward, all engaged in the unlawful killing of seals. The parties engaged on board of these vessels were taken to Sitka, and there tried, convicted, and sentenced to fine and imprisonment. After visiting various points in Alaska, the Corwin returned to her station at Astoria.

Other vessels of the Revenue-Marine fleet have proved their efficiency in scenes of trial and danger; the Dix, at Key West, at the time of the fire, rendered valuable aid in its suppression, sheltered and fed many homeless persons, guarded property from depredation, and preserved order; the McCulloch afforded shelter to one hundred and seventy persons immediately after the earthquake shocks at Charleston; the Penrose proceeded to Sabine Pass, Texas, shortly after the flood, for the rescue of those who had survived and the recovery of the remains of those who had perished, and distributed the supplies forwarded to relieve the destitute; the Woodbury, at the time of the recent fire at Eastport, Me., did good service in assisting and protecting the people of that place.

Material assistance has been given, as customary, by the Revenue Marine to the Life-Saving Service. Boats, stores, and supplies have been transported and delivered. The distance cruised while performing these services aggregated 18,988 miles.

The expenditure of the Revenue-Marine Service and the protection of seal-fisheries in Alaska for the year 1885 was \$880,232.48.

Several of the vessels of the Revenue-Marine fleet are now worn out by hard service, and should be replaced by new ones of improved construction. Suitable appropriations are needed, especially for a new vessel in place of the steamer McLane, lately withdrawn from Galveston as unseaworthy, and also for a steamer to replace one of those now on the New York station.

Respectfully submitted.

PETER BONNETT,
Chief Revenue-Marine Division.

Hon. DANIEL MANNING,
Secretary of the Treasury.

REPORT OF THE SECRETARY OF WAR.

WAR DEPARTMENT, *November 30, 1886.*

To the PRESIDENT:

I have the honor to submit the following annual report of the administration of this Department:

EXPENDITURES, APPROPRIATIONS, AND ESTIMATES.

The expenditures of appropriations under direction of the Secretary of War; by requisition upon the Treasury; during the fiscal year ending June 30, 1886, were as follows:

Salaries, contingent expenses, stationery, rent, and postage.....	\$1,992,469 95
Military Establishment: Army, and Military Academy, including the sum of \$410,684.07, credited to the Pacific railroads for transportation services rendered the War Department during the fiscal year 1886 and prior years.....	24,297,500 58
Public works, including river and harbor improvements.....	6,294,305 43
Miscellaneous objects.....	4,406,627 92
Total.....	36,990,903 38

The sum of \$1,208,016.46 pertaining to War Department appropriations was carried to the surplus fund June 30, 1886.

The appropriations for the War Department for the fiscal year ending June 30, 1887, are:

Salaries, contingent expenses, stationery, rent, and postage.....	\$1,972,051 65
Military establishment—Army, and Military Academy.....	24,081,763 21
Public works, including river and harbor improvements.....	16,723,446 69
Miscellaneous objects	3,250,275 30
Total.....	46,027,559 85

The estimates of the War Department for the fiscal year ending June 30, 1888, are as follows:

Salaries, contingent expenses, stationery, and postage.....	\$2,116,375 00
Military establishment—Army, and Military Academy.....	25,847,699 57
Public works, including river and harbor improvements.....	17,108,106 76
Miscellaneous objects	3,196,664 48
Total.....	48,268,835 81

The principal item of increase in the estimates for "Salaries, contingent expenses, &c.," over the appropriations for the present fiscal year is for furnishing the west and center wings of the State, War, and Navy Department building, \$130,000. In the Army estimates that for pay, &c., of the Army is increased \$365,000. No provision was made in the last Army appropriation act for the pay of enlisted men detailed as cooks and nurses in hospitals, and an estimate of the amount (\$70,262.50) required for this necessary service during the present fiscal year will be submitted. The cost of transportation of the Army during the fiscal years 1884, 1885, and 1886, has exceeded the regular appropriations therefor, and additional amounts are required to complete the service of those years. The estimates for public works include for armament of fortifications, \$4,645,000; improving harbors and rivers, \$10,175,870, and \$150,000 for a building for the Signal Office.

The statement appended to this report shows in detail the appropriations under the direction of the War Department for the fiscal year ending June 30, 1886; the amount appropriated under each title of appropriation, the amount drawn by requisition upon the Treasury, and the balances subject to requisition July 1, 1886.

THE ARMY.

The Lieutenant-General reports the Army at the date of the last consolidated returns, to consist of 2,103 officers and 23,946 enlisted men, divided as follows:

	Officers.	Enlisted men.
Generals.....	10	.....
General staff	573	1, 212
Ten regiments of cavalry.....	411	6, 942
Five regiments of artillery	272	2, 473
Twenty-five regiments of infantry.....	836	10, 721
Indian scouts.....	.....	593
Detachments, recruiting parties, &c.....	.....	2, 003
Total	2, 103	23, 946

During the year the Army and the country have been called to mourn the death of Major-General Hancock. He was a brave and accomplished soldier, who served with great distinction in two wars, and was thanked by Congress for his gallant, meritorious, and conspicuous share in the great and decisive victory at Gettysburg. He also had in full measure the respect and love of all his countrymen. Due military honors were paid to his memory throughout the country.

In the Division of the Atlantic little has occurred of military importance, the duties of the soldiers being mainly confined to garrisons along the sea-coast, and to the care of forts. The general commanding the division recommends the concentration of the light batteries in his command for their better instruction and discipline, and arrangements are in progress by which this may be done. He also calls attention to

the condition of the fortifications and armaments under his command and their absolute inefficiency. The necessity of repairs, both of barracks and quarters, in this division is also imperative. In selecting a place for the imprisonment of the Apache Indians recently captured it was found difficult by reason of inadequacy of barracks and quarters and their want of repair to find a proper post for their confinement. The quarters for officers and men at the Dry Tortugas, built to accommodate a large garrison, are in an uninhabitable condition, and at many other places buildings are decaying and going to ruin for want of the necessary appropriations to repair them. It is safe to say that in the event of a sudden call to furnish shelter to any considerable number of troops in this division they could not be provided for, mainly because of the want of repair of existing buildings.

Under the appropriations of the last session the enlargement of Fort Niagara and the reconstruction of Fort Porter have been begun; and the work upon the new post at Atlanta, Ga., has been continued. These improvements will contribute much to the comfort of the troops of this division; and by the abandonment of small, unimportant, and inconvenient posts now occupied for shelter merely, and by concentrating the troops in larger numbers at these new and other important places, it is hoped that good results will be obtained, not only in their discipline, but in reduced cost of maintaining them.

In the Division of the Missouri, now under the command of Major-General Terry, no important changes have occurred, except the permanent transfer of the district of New Mexico to the Department of Arizona, and the transfer of Brigadier-General Miles from the Department of the Missouri to the Department of Arizona, in place of Brigadier-General Crook, relieved at his own request and assigned to the Department of the Platte.

There have been no hostilities or serious disturbances in this division during the past year. But constant vigilance has been required of officers and men. In Montana it has been necessary to prevent raids by Indians into other reservations, and to protect agents and secure settlers from roving bands who have escaped from or have been permitted to leave their reservations. In Colorado, north of Fort Lewis, difficulties have occurred, and it was necessary to establish two summer camps in the Blue Mountain region, by which precautions the fears of settlers have been allayed and all danger avoided.

In Utah last winter the White River Utes and the Uncompahgres on the Uintah and Uncompahgre Reservations became very turbulent and rebellious, resisting the authority of the agent. At the request of the Secretary of the Interior an investigation was made by an officer of the Army, and four companies of infantry and two of cavalry were stationed at a cantonment, which has been named Fort Du Chesne, at the junction of the Grand and Du Chesne Rivers. These precautions have had the desired effect; the Indians are now quiet and the authority of the agent

appears to be restored. The troops have not, however, been withdrawn.

In the Indian Territory the settlement effected through the visit of the Lieutenant-General in July, 1885, with the Cheyennes and Arapahoes has given comparative peace to that region, and the Indians are quiet and contented. Still the constant presence of troops is necessary to preserve this present status, and to prevent, especially in the Oklahoma country, the seizure of the land by settlers and its invasion and occupancy by herds of cattle. There seems but little hope of improving this condition of things, in view of the avidity with which this fertile country is coveted by the settlers and the cattlemen, and the duty resting upon the Government to keep inviolate its agreements with the Indians for whose benefit it has been set apart. Congress alone can give the needed remedy, and in the interest of good government it is earnestly hoped by all who have executive duties to perform in this Territory that speedy action will be taken.

During the past year Fort Steele, in the Department of the Platte, and Fort Ellis, in the Department of Dakota, have been abandoned, and their garrisons removed to other and more important places. It is very desirable to reduce the number of small posts, and the appropriations made at the last session for the enlargement of Forts Riley, Russell, and Robinson, and the post at San Antonio, will render it possible, in the interest of economy and good discipline, to make still further reductions in their number.

In the Division of the Pacific, now commanded by Major-General Howard, the principal change that has occurred has already been noticed—the adding of New Mexico to the Department of Arizona and the assignment of Brigadier-General Miles to its command in place of Brigadier-General Crook.

In Washington Territory, upon the requisition of the Governor, troops were ordered to Seattle to protect public property and suppress, if necessary, riotous outbreaks that appeared to be imminent and threatening, arising from an attempt to drive the Chinese from that city and other places in the neighborhood. The troops remained there for some time; their presence quieted the disturbances; the power of the civil authorities was re-established, and the troops were withdrawn without being called upon for any active duty.

In the Department of Arizona, from the date of my last report until early in September, the troops and all the military resources of the department have been employed in pursuing and finally capturing Geronimo and his band of outlaws. In November last Geronimo and his band were in Mexico, making occasional inroads into this department, committing murders and other crimes, and undoubtedly communicating with and receiving aid and encouragement from the remainder of their people, the Chiricahua and Warm Spring Apaches, who had not left the reservation of San Carlos. The removal of these Apaches to some secure

place, far away from Arizona, had been the subject at that time of frequent conference between this office and the Secretary of the Interior. Not a mere temporary removal was contemplated, but a permanent withdrawal of these warlike and dangerous Indians from a Territory to the prosperity and security of which they had been a constant menace from the time of the Camp Grant massacre in 1871. The Secretary of the Interior recommends such removal in his report to Congress in 1885. The matter had also been discussed with the Lieutenant-General, who was not then prepared to recommend their forcible removal. In November last he brought the matter to my attention, and it was decided that he should go to Arizona and advise with General Crook upon this and other questions touching the situation. He left on November 22, 1885, and having consulted with General Crook, and also with Capt. Emmet Crawford, Third Cavalry, both of whom considered that the time was inopportune for such an attempt, he deemed it best, in deference to their opinion, to await a more advantageous opportunity for the accomplishment of this purpose. Captain Crawford was then on the point of starting in pursuit of Geronimo with 200 Indian scouts, many of whom were Chiricahuas, from the reservation. Captain Crawford considered that the removal might have a bad effect upon the scouts, in whom both he and General Crook placed great confidence. The report of the Lieutenant-General, sent at that time to me, gives a graphic account of the situation:

I arrived at Fort Bowie, the headquarters of General Crook, November 29, and learned that the area of country covered by raids from the hostile Chiricahua Apaches comprises about 30,000 square miles in our territory, and lies between the Gila River on the west and the Rio Grande on the east, the thirty-fourth parallel on the north and the Mexican line on the south. This region is all in Southeastern Arizona and Southwestern New Mexico, and is the scene of the murders and depredations that have been committed at various times since the Chiricahuas—42 men and 94 women and children—went on the war-path last May, and its area is prolonged into the Sierra Madre Mountains of Northern Mexico, a distance south of about 400 miles and extending east and west 200 miles.

The whole extent of territory in this country and Mexico in which the hostiles roam and raid comprises about 80,000 square miles. It is a region of rough, broken, and bold mountain ranges, and numerous spurs, with an occasional plain, little vegetation, and naturally watered only at a few points by springs and water-holes at great distances apart. Each range of mountains and its spurs furnish splendid points of lookout over the plains to the far-seeing and keen-eyed Apache, and wonderfully add to the difficulties of pursuit, and as his nimble foot and natural instincts enable him to surmount the rugged and arid features of the country and travel in any direction, it is not strange that he often evades and escapes from his pursuers. He is a mountain or foot Indian, bred from childhood to climb the highest peaks or cross the driest plains, and accomplish journeys without other food than roots or berries and little or no water. When on the war-path, or one of his peculiar raids, he goes "light," wearing little or no clothing, carrying no rations, and encumbering himself only with his gun and ammunition, and traveling over the roughest region on foot as much as 60 miles a day. It is only of recent years that the horse has become his auxiliary, but even now, when pressed, he kills and abandons him and flees on foot over almost impassable trails.

When a band becomes hostile they start suddenly and almost always in a southerly direction for Mexico, and having almost invariably a start of several hours in advance of any knowledge on the part of the troops stationed near their agency, attack and murder such isolated persons as they may meet on their route, and supply themselves with horses and plunder at ranches that have been opened up within recent years. Hot pursuit is ordered from every direction, but to halt them long enough for a fight is most difficult. The moment they are attacked they disperse in as many different directions as there are individuals, to come again together at some previously-arranged point a hundred miles distant. The trail is then lost, and our troops, with the aid of Indian trailers, endeavor to pick them up by cutting the main direction they have taken, but success in this does not often go beyond the capture of a few women and children.

Previously to three years ago the scene of these Apache raids was sparsely settled, and the loss of life and property was, consequently, much less than during the present outbreak. But few horses and cattle were in the country. Now the Indians obtain all they desire in the way of animals without difficulty, as large herds are located at every spring and water-hole, and every few miles new mounts of fresh horses are at their service. Many of the settlers have failed to realize the dangers of their situation. They are often unarmed, and travel from ranch to ranch and town to town—distances of from 20 to 40, 60, and 100 miles—alone and carelessly. Prospectors present to the wily Apache even a more tempting condition, and in almost every instance their murders have been visited upon people who were thus isolated and unprotected and unarmed, and this doubtless accounts for the unusual number of whites that have been butchered since the last outbreak of the Chiricahuas. To protect these people and kill or capture Geronimo's band of Apaches has been the problem before General Crook; and while his success has not met with satisfactory results, he has accomplished much towards their final destruction, considering the many difficulties of the situation, and I have every hope his present plans and operations will permanently end all trouble with the Chiricahuas.

The original number of males that escaped from the agency was 42. Eleven of these have been killed by our troops, and 31 women and children captured. This leaves still out 31 males and 63 women and children. All of the women and children are in Mexico, in the Sierra Madre Mountains, and all of the males are there also but 10. These 10—11 originally, but 1 was killed near Fort Apache recently—are those who committed the murders during the recent raid.

An expedition under Capt. Wirt Davis, of the Fourth Cavalry, a good officer, is now in Mexico, with a force of friendly Apache scouts, endeavoring to locate the camp of the hostiles, steal upon them unawares and accomplish their destruction. He is possessed of information which leads to the belief that his efforts will be successful. Another force of scouts started November 29, from Fort Bowie, under Captain Crawford, to intercept the 10 raiders recently in the vicinity of the San Carlos Reservation and now on their way back to Mexico. He has seventy days' rations with him, and will operate similarly to Captain Davis and in conjunction with him. The obstacles to be overcome in the Sierra Madres are beyond the comprehension of persons unacquainted with that rugged region, but I have confidence the best results may be looked for.

In the area north of the Mexican line which has been subjected to disturbances there are and have been for some time nearly 3,000 troops, three-fourths cavalry. They are stationed at nearly all the known springs and water-holes, and cover, by scouting, patrolling, and observation, a region of 40,000 square miles in every direction practicable for the operations of white men.

Inclosed herewith is a map showing their stations. No more troops can, in the opinion of General Crook, be successfully utilized, and no better dispositions can be made. All are on the alert, and each detachment takes up the trail on the first information, but owing to the character of the country it is often found that their best efforts are futile against an enemy so familiar with the mountains, so wily in his in-

instincts, and so small in numbers that his warfare partakes more nearly of those characteristics belonging to the bushwhacker or bandit than those of any other species of outlaw to whom he can be likened. General Crook knows them well, and his familiarity with all that pertains to the situation is such that I feel confident he will work out a solution of the troubles. It will take time, however, and there may be more innocent lives lost, but it should be remembered that almost all of our frontier settlements have been compelled to pass through similar ordeals whenever advanced to the immediate vicinity of the wild Indian.

The fact that the murders and depredations have occurred within the geographical limits of two different military departments has made operations a little embarrassing to each military commander, neither having full control. To remedy this defect, I recommended the temporary transfer of the District of New Mexico to the Department of Arizona. This you have directed, and as General Crook has now undivided authority, I have reason to hope the responsibility it involves will be met and assumed with that energy, fearlessness, and tact which he has always shown, and will bring good results.

In the execution of the Lieutenant-General's instructions to pursue, capture, or destroy the hostiles under Geronimo, a sad and unexpected encounter with a body of Mexican troops, said to have been pursuing the same object, led to the death of Captain Crawford. He was a soldier of great endurance, energy, and courage, admirably fitted for the work he had undertaken. His untimely end in an obscure skirmish, and in the very act of calling a parley, is sadly to be deplored as a loss to the Army and the country.

Captain Crawford had organized a battalion of White Mountain and Chiricahua Indians at Fort Apache on the 9th of November, 1885, and with Lieutenants Maus and Faison, First Infantry, Lieutenant Shipp, Tenth Cavalry, and Assistant Surgeon Davis, entered Mexico on December 11, intending to find and attack the hiding place of the hostiles in the Great Sierra Madre Range. Along his route reports were constantly brought in of depredations by the hostiles. On the 9th of January last Captain Crawford with his command on foot came upon their camp near the Rio Haros and attacked it that night, but the hostiles became alarmed before the movement to surround them was complete, and escaped to the mountains. The next day, January 10, they sent in a squaw to make arrangements for a meeting between Natchez and Captain Crawford on the 11th. During the pursuit Captain Crawford had given them no rest, and had exhibited perseverance and intelligence in the highest degree. The Indians were dispirited and worn out by his pursuit, and finding him close upon their trail, and knowing his character and ability, there is little room to doubt that the result of the meeting between Crawford and Natchez would have been the absolute surrender of the hostiles and the closing of this campaign, so full of all that makes Indian wars horrible.

But the meeting was not destined to occur. Early on the morning of the 11th a body of Mexican soldiers attacked Crawford's camp, wounding one of our scouts. The officers succeeded in stopping our return fire in about fifteen minutes, and Captain Crawford and an interpreter,

Mr. Horn, went forward for a parley. While it was in progress, suddenly, and without warning, the Mexicans opened fire, wounding **Captain Crawford** mortally and the interpreter in the arm. The Mexicans continued to fire for an hour and a half, and only consented to reply to our officers after it was evident they could not capture our position. **Captain Crawford** and his officers all wore uniforms, but without insignia of rank. The general opinion of the white men with **Crawford's** command was that they must have known that **Crawford** was a white man and soldier of the United States. The Mexicans were irregular and not national troops, and asserted that they were following the trail of the hostiles, and seeing the Indian scouts thought they were the Indians they were pursuing.

The matter was referred at the request of this Department to the Mexican Government by the Department of State, and many communications on the subject have passed between the two Governments. The Mexicans deny all the statements made by our officers, say that they were the attacked and not the attacking party, and that they had no knowledge who **Crawford** was or of his command. They also assert that they were in sight of **Crawford's** camp, and that no fight with the hostiles took place as stated by our officers. They declare that all the depredations in Mexico were committed by **Crawford's** scouts and not by the hostiles, and that the animals lent them by **Lieutenant Maus** after **Crawford** was shot, on which to carry away their wounded, were animals stolen from them by **Crawford's** command.

It may be stated here that the Mexican Government demands indemnity for depredations alleged to have been committed by **Crawford's** command—the stealing and killing of cattle, marauding upon inoffensive inhabitants, breaking down and burning fences, &c. The only claim thus far made on the part of the United States is based upon the proceedings of a board of survey, which found that on the day following the engagement in which **Crawford** was killed **Lieutenant Maus** was “compelled by these irregular Mexican troops to turn over to them a number of mules and their equipments under circumstances which rendered it quite impracticable for him to have done otherwise.” The report of **Lieutenant Maus** is published with the reports of **General Crook**.

The proceedings of this board, approved by the Secretary of War, were furnished to the State Department on October 25 for such action as the Secretary of State might deem proper. The negotiations are now pending between the Department of State and the Mexican Government, and the matter is therefore no longer in the hands of the War Department. The subject of the correspondence with the Mexican Government has been in reference to the killing of **Captain Crawford**, and the return of the horses and mules loaned to the Mexican troops or payment of their value. No definite result has yet been announced.

The whole region over which these Apaches have for years carried on their murderous raids, and over which we have the right by convention with Mexico to pursue them, has been demoralized to such an extent, and the arm of authority is so powerless, that lawlessness is rather the rule than the exception. That the conduct of the Mexican irregulars was utterly unjustifiable in bringing on this engagement seems to admit of no question. It is difficult to ascertain precisely what motive prompted them; and how far the Mexican Government is responsible for their misconduct, and its sad results are questions upon which we possess at present no reliable evidence upon which to decide.

After the skirmish Lieutenant Maus took command and had the appointed meeting, which resulted, not in the surrender of the Indians, but in the promise on the part of Geronimo that he would meet General Crook near the boundary line in about two moons. More than seventy days elapsed before Geronimo appeared at the appointed place. General Crook and he met on March 25, at El Cañon, in Mexico, 25 miles south of the line. The understanding was that he should not be accompanied by troops. The Indians were encamped on a rocky hill, in a strong and almost inaccessible position. They were fierce and independent, well armed with the best guns and ammunition, and had blankets and supplies which they had obtained in Mexico. General Crook demanded their unconditional surrender. The only propositions they would entertain were three, which General Crook states:

- (1) That they should be sent East for not exceeding two years, taking with them such of their families as they desired.
- (2) That they should all return to the reservation on the old status.
- (3) To the war-path with all its attending horrors.

He was obliged to decide quickly, and accepted their surrender on the first proposal, and the whole party started, escorted by the Apache scouts under Lieutenant Maus, for Fort Bowie.

The terms of the surrender were received here March 30. The response of the President was that their imprisonment in the East for two years and their return to the reservation could not be approved. Certain instructions were given, but before General Crook received the dispatch, Geronimo and Natchez with twenty men and thirteen women left Lieutenant Maus's camp on the night of the 29th and escaped to the mountains. The remainder of the band, numbering sixty under Chihuahua, were sent to Fort Marion, Florida, where they are now held as prisoners. The children have been sent to the Indian school at Carlisle. Lieutenant Maus followed Geronimo's trail until he was satisfied that further pursuit at that time was useless. This unfortunate escape was attended by the usual sad results. The route of the Indians to the Sierra Madre Mountains in Mexico was marked by atrocities similar to those that had usually attended their course.

After these events the Lieutenant-General became satisfied that the Apache scouts could not be absolutely depended upon to fight and kill

their people, and could be trusted only to the extent of capturing or inducing them to surrender. General Crook had organized them and had not lost his confidence in their fidelity. To avoid the embarrassment of the situation he asked to be relieved; and in the change of commands following the death of General Hancock and the retirement of General Pope, General Crook was assigned to the Department of the Platte and General Miles took his place in the Department of Arizona on the 27th of April.

The instructions of the Lieutenant-General to General Miles upon assuming command were in accordance with the directions of the President, and were communicated by the Adjutant-General, as follows:

He directs that the greatest care be taken to prevent the spread of hostilities among the friendly Indians in your command, and that the most vigorous operations looking to the destruction or capture of the hostiles be ceaselessly carried on. He does not wish to embarrass you by undertaking at this distance to give specific instructions in relation to operations against the hostiles, but it is deemed advisable to suggest the necessity of making active and prominent use of the regular troops of your command.

General Miles began his campaign with great zeal and energy, and it was continued with the same vigor till it ended in September following.

Our troops at once began the active operations, and the general reported on June 7 that for thirty-six days they had followed the hostiles over 800 miles in the most mountainous region of the country, breaking up their camps, capturing horses, equipments, and supplies, and having several engagements. An attempt on the part of the hostiles to reach the agency and obtain assistance was frustrated. On the 20th of July Captain Lawton again surprised Geronimo's camp, capturing all their property, including food and horses. As the pursuit went on the Indians had but little rest, and were reduced in numbers by encounters with the troops and by desertion. Captain Lawton, whose report is published, gives a detailed account of his movements and the hardships suffered by his troops in traversing more than 1,300 miles in this difficult country, during intense heat and often destitute of water. The admirable bearing and conduct of all the troops engaged in this pursuit cannot be too highly commended. He arrived near Fronteras on the 20th of August, and learned that the hostiles had communicated to the Mexicans a desire to surrender. Some negotiations followed through Lieutenant Gatewood, which resulted in Geronimo visiting Lawton's camp and intimating his wish to make peace, and to talk with General Miles. He marched with Lawton's command to meet General Miles, and surrendered to him on September 4, with his band.

The fact of the surrender was communicated to the President and the authorities in Washington on September 7, and from the information received on that date the surrender was supposed to be unconditional. To this dispatch the President replied that all the hostiles should be very safely kept as prisoners until they could be tried for their crimes or

otherwise disposed of. The first intimation that the surrender was not unconditional reached the Department on September 9 by telegraphic advices from General Miles, through his division commander, that the Indians surrendered with the understanding that they would be sent out of the country, and in pursuance of this plan General Miles had ordered them to be taken to Fort Marion. As this order was in direct opposition to the President's orders, General Stanley was directed from the War Department to stop these Indians at San Antonio, Tex., and hold them securely until further orders.*

Nothing more specific in regard to the surrender was received at the Department until the receipt of General Howard's dispatch of September 24, in which he said that he believed at first from official reports that the surrender was unconditional, except that the troops would not kill the hostiles; but from General Miles's dispatches, and from his annual report, the conditions were plain that the lives of all the Indians should be spared, and that they should be sent to Fort Marion, where their tribe, including their families, had already been ordered.

On the 25th of September General Miles was directed by the President to report by telegraph the exact promises, if any, made to Geronimo at the time of the surrender. In his reply, General Miles states:

At the request of Captain Lawton, I joined his command. Geronimo came to me and recounted his grievances. I informed him that Captain Lawton and Lieutenant Gatewood were honorable, and that I was there to confirm what they had said to them, and that if they threw down their arms, and placed themselves entirely at our mercy, they would not be killed; but that they must surrender absolutely as prisoners of war, and rely upon the justice of the Government, or trust their future to the President of the United States. I informed them that I was removing all the Chiricahua and Warm Spring Indians from Arizona, and that they would all be removed from this country at once and for all time, and this they understood. Geronimo replied that he would obey any order I might give, and go to any place, and that he would bring in his camp, which he did. Natchez subsequently surrendered his camp in the same way. Their status is the same as that of Chief Joseph, Sitting Bull, and hundreds of others. They are strictly prisoners of war, the result of the skill and fortitude of our troops. As prisoners of war they are now entirely under the control of the President.

The account of the surrender in the report of General Miles, subsequently received, does not materially differ from the account given in the dispatch above referred to.

The terms and conditions attending this surrender were such that Geronimo and those of his band who had committed murders and acts of violence in Arizona and New Mexico could not properly be handed over to the civil authorities for punishment, as was intended by the President, and therefore, on the 19th day of October, orders were issued, by direction of the President, that Geronimo and the fourteen hostile Apache adult Indians captured with him should be sent from San Antonio, Tex., under proper guard, to Fort Pickens, Florida, there to be kept in close custody until further orders. These Indians had been guilty of the worst crimes known to the law, committed under circumstances of great atrocity, and

* All the dispatches and correspondence referring to the surrender of Geronimo were sent to the Senate February 23, 1887, and will be found in Senate Ex. Doc. No. 117, 49th Congress, 2d session.

the public safety required that they should be removed far from the scene of their depredations and guarded with the strictest vigilance. The remainder of the band captured at the same time, consisting of eleven women, six children, and two enlisted scouts, were ordered to be sent from San Antonio to Fort Marion, Florida, and to be placed with the other Apaches under custody at that post. Geronimo and the adult members of his band arrived at Fort Pickens on October 25, and on the same date the women and children, and the two enlisted scouts reached Fort Marion.

On the 20th of October General Miles advised the Department that a small party of Apache Indians, who had separated from Geronimo and his band in August, 1885, and consisting of Mangus, two men, and eight women and children, had arrived at Fort Apache, having been captured by a detachment under Captain Cooper, Tenth Cavalry. Under orders issued October 26, Mangus and the two adults were sent from Fort Apache October 30 for confinement at Fort Pickens, Florida, at which place Mangus and one of the men arrived on the 6th of November, the other having died on the way. The eight women and children were sent to Fort Marion at the same time.

It is proper also to state the circumstances which led to the removal to Fort Marion of the Warm Spring and Chiricahua Indians on the Fort Apache Reservation.

On the 4th of July General Miles telegraphed that there were strong military reasons for allowing a delegation of the Apaches from the Fort Apache Reservation to visit Washington in regard to their removal from Arizona. Upon consultation with the President and the Secretary of the Interior it was decided that they could come, and they at once started, under charge of Captain Dorst, Fourth Cavalry. This permission was granted upon the supposition that they desired a change of abode, or could be induced to change without coercion, and the only question to be determined here would be where they should go.

Later, by telegram and letter received after the delegation was on its way, General Miles urged that the Apaches on the Fort Apache Reservation, numbering about five hundred, be sent to the Indian Territory, and that the existing laws should be so changed that this disposition of them could legally be made. This proposal was considered for many reasons entirely impracticable, and General Miles was so informed on July 15, and that military movements must proceed in view of the present arrangements in regard to these Indians. The law was against it, and the Executive would not be justified in requesting a change. To place this lawless and dangerous tribe among the peaceful Indians of that Territory would have been a breach of good faith and treaty obligations. But the same proposal was again renewed by him on the 20th as the solution of the whole difficulty, and he requested that the delegation be allowed to visit and see certain points in the Indian Territory.

In the meantime the whole matter of the removal of the tribe to the Indian Territory or to any other place voluntarily was settled by the demands and expressions of opinion made by the Indians then in Washington. Their sole desire was to remain where they were; that apparently was the object they had in view in coming, and the assurance of the authorities here that they should not be removed was very earnestly pressed. In their interviews with the President, the Secretary of War, or the Secretary of the Interior they expressed no desire or willingness to go elsewhere. No assurance was given them in any form of words that they should remain at Fort Apache. The conferences granted them were solely to hear their complaints and their requests. Information came from the officer in charge of them that they were restless and uneasy, dissatisfied with their reception and the failure to receive any assurance that they could remain at Fort Apache. In this condition of affairs the Lieutenant-General, in an indorsement to the Secretary of War dated July 30, 1886, remarked:

There are now on the reservation near Fort Apache seventy-one Chiricahua and Warm Spring adult male Indians. These are exclusive of those in this city. It is my belief that if the delegation which is now here goes back to the reservation without having received what they deem a most satisfactory promise on the part of the Government, a large number of those that are now peaceable will endeavor to join Geronimo. I therefore recommend that authority be granted me to direct General Miles to arrest all the male Indians now on the reservation near Fort Apache, and send them as prisoners to Fort Marion, Florida; that the delegation now here be sent there also, and that they be held at that point as prisoners of war until the solution of the Geronimo troubles.

This recommendation was approved so far as the removal of the Apaches on the Fort Apache Reservation was concerned, provided they could all be successfully secured by the troops; and the President directed inquiries to be made of General Miles for his opinion in regard to their forcible arrest. General Miles replied, objecting to such removal, and by letter gave his objections in detail. But, on August 20, he informed the Department that Colonel Wade, commanding at Fort Apache, was of opinion that the Indians there could be secured and moved without difficulty. Orders thereupon issued that they should be taken and sent to Fort Marion, which were carried out on the 7th of September, and they were conveyed to that fort, where they arrived on September 20, and where they are now confined.

In the matter of the Lieutenant-General's recommendation that the delegation of Apaches in Washington should also be sent to Fort Marion, it was thought that these Indians should first be returned to Arizona, which was the understanding upon which they came here. After their return they could be treated as the rest of their tribe and taken to Fort Marion. But it was of the first importance that they should not confer with their brethren on the reservation until after the latter had been secured by the troops and were in custody for removal. This delegation contained some of the most dangerous of the Chiricahuas.

With this intention on the part of the Government they started for Arizona with Captain Dorst, visiting on their way the Indian school at Carlisle. They were stopped on their journey after leaving Carlisle and sent back to Fort Leavenworth. While they were there the Indians who were to be sent from the Fort Apache Reservation to Florida were secured and started on the way. It was thought best by the Lieutenant-General that the Indians at Fort Leavenworth, who had become turbulent and excited, should be sent direct from there to Fort Marion, and orders were issued to that effect, as it was not considered practicable for any of them to meet the other band on their journey east, as had been proposed. Captain Dorst and these Indians, thirteen in number, together with three interpreters, left Fort Leavenworth on the 13th of September, and on the 20th the Department was advised of their arrival at Fort Marion.

A summarized statement of all the Indian prisoners now at Fort Marion and Fort Pickens will be found in the appendix.

It is hoped that the Apache wars and raids that have devastated Arizona and New Mexico, and the adjacent States of Mexico, for so many years, are ended by the permanent removal of the fiercest and most dangerous of the Apache tribes.

The Lieutenant-General states that many officers are becoming disabled by reason of long service on the frontier and from wounds received or disease contracted during the war of the rebellion. He is of opinion that while those who are disabled are transferred to the retired list as fast as possible it would be a great benefit to the Army if Congress would increase the list and include upon it all officers found by duly constituted boards to be permanently incapacitated for active service. In this belief I concur, and I recommend such action by Congress. I also concur in the opinion expressed by the Lieutenant General that if the Army were increased five thousand men, and two companies were added to each of the infantry regiments, the Army would be enabled to creditably perform such service as the country might demand.

The reports of the commanding officers of the Artillery School and of the Infantry and Cavalry School are very satisfactory, and show that a high standard of military education has been established, which promises to lead to the best results. The instruction of the Army in the use of the rifle or carbine has been thoroughly prosecuted during the year; the returns from each department and the results of the regular competitions exhibit a decided advance in rifle firing. As the importance of company practice in skirmish firing is better recognized, it is believed that in the near future many of the soldiers will become expert skirmishers, and the effective fire of the mass of the Army will be greatly improved.

The discipline of the Army is reported to be good, and the efficiency of the various arms of the service well maintained. It has but little opportunity for active service, and what it has is not of the most agreeable or inspiring kind. The control and pursuit of Indians, difficult

and hazardous as it often is, and developing as it does the individual character and gallantry of officers and men, is yet war on a very limited scale, and bears but slight resemblance to the great contests which follow the collision between nations. In any war with a foreign power our regular forces would be the nucleus of the great muster of volunteers, which experience has taught us must be the natural resource in times of danger, and the discipline, guidance, and command of which must fall mainly upon the officers of the Regular Army.

The efficiency, therefore, of our small force should be at the highest point, and the officers should be instructed, competent, and accomplished in all knowledge that pertains to the art of war and the duties of the soldier. Without great additional expense it should be and can be made a model army, for it has the material in its officers and men to take this position. It should be borne in mind in this connection that it has been and still is the policy of the Government to rear and train at West Point young men from all portions of the Republic to be soldiers. No expense is spared to give them the best military education possible. Only those who succeed in passing the tests of rigid examinations are selected for the public service. So severe is the ordeal through which they pass that but one in three succeeds in graduating. Nor is expense spared in providing for these young men thus educated when they take their places in the Army, for the pay of our officers is higher through all its grades than that of any other army save the Anglo-Indian army. And yet, after thus preparing and providing for them, there are no special requirements, common to all, demanding their progress and growth in the profession of arms; and no inquiry is made, or examination had, as the years go by, and they advance grade after grade, whether as individuals they are worthy of promotion, and are equal to the higher rank and larger responsibilities they are forced to assume. When a second lieutenant enters the service, whether from civil life, the ranks of the Army, or from the Military Academy at West Point, the rigid examination above alluded to is made the necessary condition for the commission. But this once passed, under present regulations, the officer can, and but too frequently does, close his books and his studies; and if he does not overwork or expose himself, he knows that, with good health and life, he is certain, under the operation of compulsory retirement, to reach the highest grade open to seniority in his arm of the service.

I assume it to be true in the Army, as elsewhere, that no man should occupy a position for which he is not fitted; and it is equally true that there should be some way in the Army, as elsewhere, through which such fitness should be ascertained. It may also be assumed that no men are so well fitted to determine the capacity or incapacity of a candidate for a place as those who have already filled the place and are familiar with its requirements and its duties. It would seem, therefore, that no objection can reasonably be urged against an examination

as a condition of promotion, the same to be conducted by officers of higher grade. This should not be a competitive examination, but simply such an examination as would demonstrate the fitness of a candidate for promotion properly to perform the duties of the grade to which he aspires. It should be a professional examination, having reference to the mental, moral, and physical fitness of the candidate. Its object is plain—the advancement and elevation of the service. Surely there can be no reasonable objection to this test on the part of those who will be subjected to it.

Examination as a means of ascertaining fitness for promotion is no longer an experiment in the Army. It has been in operation in the Medical Corps since 1834, when an act was passed requiring examination to precede admission to the corps as first lieutenant, and another examination must be passed before promotion to the rank of major. 4 Stat., 714. In 1863, examination was required as a necessary preliminary to promotion up to the grade of field officer in both the Engineer and Ordnance Corps. This still continues in force in the Engineer Corps. 12 Stat., 743. In 1874 an act was passed with regard to the Ordnance Corps, providing that no appointment or promotion therein should be made until the officer so appointed or promoted should have passed a satisfactory examination before a board of ordnance officers senior to himself. 18 Stat., 245. In all these corps the result has been so satisfactory that its propriety and necessity are no longer questioned, and no one would think of returning to the earlier system. While the nature of the examination for the line of the Army and for the staff would differ materially, there would seem to be every reason to believe that it would be equally for the advantage of each. It should, therefore, be extended to the line of the Army, and no distinction made between different arms of the same service; thereby implying that an examination was needed for one class not demanded for the other. The necessity for such examination has already been demonstrated in two of the staff corps by the failure of officers to pass their examinations, and their consequent suspension from promotion; while the rule of promotion by seniority, unqualified by any examination as to fitness, frequently allows the promotion, in the line of the Army, of men incompetent and unfit for service.

Soldiers are developed and matured rapidly on the battle-field, but in time of peace it is only by study and application, by practical experiment, by exercise in the use of weapons, and by keeping fully abreast of the world's knowledge, that the soldier can be made ready for his real work, when it comes. If he gets his promotion and his pay, and his rank and authority through lapse of time, and a perfunctory routine performance of his daily duty without offense, why should he labor and strive for a higher excellence? If he is of better and truer mettle than to be content and indifferent, and does strive and labor and earn, he gets no more than he who is idle and waits. It is the pre-

sumption of fitness and superiority, because of seniority, that makes seniority a ground of promotion; but, like all presumptions, it may be rebutted, and, if the man is shown to be unfit, the reason utterly fails.

In the Navy, examination for promotion to a higher grade in the service has been the law since 1864. This examination is intended to ascertain the officer's "mental, moral, and professional fitness to perform all his duties at sea;" and it must also appear that a board of surgeons has pronounced him "physically qualified to perform all" those duties. R. S., sec. 1493-1510. All agree that these examinations have been of great benefit to our naval service, and cannot be abandoned.

In the English army, examinations are required for promotion up to the grade of field officer. In the Austrian, an examination is required on entering the service, and another, which is very exacting, for the grade of field officer. In the German army, examinations are required.

Such investigation as we have been able to make in this department fails to disclose any service except our own where, in the line of the Army, seniority alone is the rule of promotion.

I would therefore suggest for the consideration of Congress that general law be enacted, with provisions respecting examination similar to those which govern promotion in the Navy, with such changes and limitations, in regard to the number of examinations, and to what grades of rank and to what arms of the service they shall be extended, as may be considered necessary in applying the law to the Army.

THE MILITARY ACADEMY.

The Superintendent reports that there were present September 1, 1886, three hundred and nine cadets. The total number of officers for duty at the post, including eight professors and two surgeons, is fifty-eight.

The Superintendent strongly favors the general adoption of the competitive system in the selection of candidates for the Academy, and states that in the ten years beginning with 1873 and including 1882 two hundred and sixty-nine cadets graduated out of five hundred and sixty-nine appointed after competition, and two hundred and fifty cadets graduated out of one thousand and one appointed without previous competition. In other words, there is a difference of nearly 100 per cent. in favor of the success at the Academy of those selected by competitive examination.

An examination of the records of the Academy shows that the first six months' course is a fair test of a youth's ability to succeed. If his position in his class is doubtful then, he is very sure, sooner or later, to be found deficient. If this fact were more generally recognized, it would relieve the officers of the Academy of much useless labor, and the friends of deficient cadets of much fruitless exertion and anxiety.

The discipline has been excellent throughout the year, with but one exception. On August 28, thirty-eight cadets violated the orders in

regard to the reception of the furlough class. Six of the cadet officers were tried before a general court-martial, convicted, and sentenced to dismissal. The sentence was approved by the President, but so much thereof as related to dismissal was remitted and the officers were reduced to the ranks. The others who took a culpable part in the affair were punished under the authority vested in the Superintendent.

The report of the Board of Visitors has not yet been received at this Department.

ADJUTANT-GENERAL'S DEPARTMENT.

The annual encampments of the militia were inspected in nineteen of the States by officers of the Army, in compliance with requests from the State authorities. It is highly important that the encampments in all the States should be inspected annually by officers detailed from this Department, thus enabling the militia to receive the benefit of contact with trained and instructed soldiers. The reports of the inspecting officers show that this contact is of the greatest advantage; but, to obtain the highest efficiency, the militia should be armed and equipped like the regular Army, and therefore an increase of the appropriation provided in section 1661 of the Revised Statutes should be made, as provided in the bill (S. 222) which passed the Senate at its last session, and is now pending in the House with an amendment.

The suggestions of the Adjutant-General as to drills, uniform, the selection of officers, and the location and duration of encampments, should receive the careful consideration of State officials.

When the Adjutant-General's report was prepared there were thirty-nine officers detailed at colleges under the authority granted by section 1225 of the Revised Statutes and the amendments thereto. The total average number of male students at these colleges was 7,601, of whom 432 were under 15 years of age. The total average attendance at artillery drills was 530, and at infantry drills 3,282. The least average number of students at any college was 52, and the largest average 630. Last year only three colleges had an average attendance of over 150 male students; at twenty-two it was below 100, at twelve it was under 60, and five of the latter had an average attendance of less than 40. This year nineteen have an average attendance of over 150, at eleven it is over 100, while there are but eight with an average attendance of less than 100, of which but one is under 60—a very satisfactory increase and evidence of the growing interest manifested in military education. There is still room for improvement, however. At some of the colleges it would be gratifying if a greater interest was manifested by the faculty, and to accomplish this the officer detailed as professor of tactics and military science should be a recognized member of the faculty, with an equal vote, and military instruction should be given an equal position with other departments of study.

It is intended during the coming year to issue a new edition of the Army Regulations, revised and condensed, in a more compact form, and omitting many provisions which do not form any proper part of the regulations of the Army. The small appropriation for the military prison has caused much embarrassment and made it necessary to retain prisoners at posts, awaiting vacancies at the prison. The estimates are prepared with great care, and it is hoped the full amount asked for will be appropriated.

In the pension branch of the Adjutant-General's Office during the last year there was an increase of 12,757 calls for information from the Pension Office as compared with the previous year; this year there were 186,239 calls received, an increase of 25,238 over last year. There were 55,946 unanswered calls on hand on the 1st of October, 1886, equal to about three months' work. In other divisions of this office there has been a large increase of work growing out of recent legislation in regard to the re-muster of volunteer officers and the removal of the charge of desertion, so that the work of the office is necessarily falling behind. In consequence of this the Adjutant-General asks for an increase of twenty-five clerks for his office.

INSPECTOR-GENERAL'S DEPARTMENT.

During the year all the military posts have been inspected as required by regulations. Numerous special inspections have also been made, and the money accounts of all disbursing officers have been verified.

The Inspector-General reports that the officers of the Army are sober, orderly, capable, intelligent, and ambitious to excel; while the enlisted men are sufficiently intelligent and educated, and as well set up and instructed in drill as opportunity permits. They are orderly, subordinate, and faithful, and endure the hardships of their calling with commendable fortitude. He reports the Army as a whole "in a very healthy and gratifying condition."

The clothing is satisfactory and the food was never better than at present. He recommends that a tailor and cook be enlisted for each company, troop, battery, and band; the tailor to receive 50 cents per day extra-duty pay; that no charge should be made against enlisted men for altering their clothing, and that the cook should be paid such extra-duty pay as will make his total compensation \$30 per month. I concur in these recommendations, and attention is called to the report of the Commissary-General on this subject.

The condition of the post cemeteries is not satisfactory, and the post commanders have no funds to put and keep them in proper repair.

JUDGE-ADVOCATE-GENERAL'S DEPARTMENT.

The records show that the number of cases tried by general court-martial during last year was less by 345 than the previous year. This

decrease, the first in seven years, was accompanied by a decrease of 1,627 cases tried by regimental and garrison courts. While this is an improvement, there is still much to be done. It must be remembered, as I stated in my report of last year, that there is now no provision of law by which an enlisted man can be punished for any offense against good order and discipline, except by the action of a court-martial. In the armies of all other civilized nations, the court-martial is relieved from the trial of slight derelictions of duty, and the power of summary punishment for minor offenses is vested in commanding officers.

In the Army the desire for a change in the present method is almost universal, and such change would be attended with beneficial results both to officers and enlisted men. The report of the Acting Judge-Advocate-General indicates the present methods of punishment in the English service, and some similar provisions might with advantage be adopted in our own. He also invites attention to his report of last year, in which he recommended that the Articles of War should be revised. I am of opinion that many of the articles should be changed; and I hope to present to Congress at an early day such changes as may be considered necessary for the present needs of the service. Our present code is of English origin and we have adhered to it, although the English have made great and essential changes in its provisions.

Attention is invited to the condition of the law with regard to civilian witnesses. The result of a decision by the Attorney-General, to the effect that a court-martial has no power to punish a civilian witness for refusing to testify, leaves the court in a condition which may at times lead to an entire failure of justice. This subject was referred to in last year's report, and the suggestion is renewed that a statute should be enacted whereby an attachment against such witness for contempt would issue upon application to a United States court.

The limits of the amount of punishment allowed by our Articles of War are undoubtedly too extended. In forty-two of the fifty-four articles which practically constitute the military penal code, the punishment is left to the discretion of the court. The result of this is that similar offenses, if tried before different courts, may meet with widely different punishments.

This is a great evil, and can only be remedied by legislation limiting the extent of punishment for the different offenses under the military code.

I must also call attention to the decision of the Supreme Court, that neither a police officer nor a private citizen can arrest and detain a deserter. This decision will deprive the Army, in arresting and securing deserters, of the assistance of civilians and police officers, who have heretofore rendered valuable services in that direction. It has always been considered that arrests could be thus made for the purpose of delivering as soon as possible the offender to the military authorities, and that the rule of the common law in that regard could properly be fol-

lowed. The importance of securing such assistance is so manifest, in cases where it is not always possible to have in the hands of the party who is able to arrest the deserter a written warrant or military order, that I feel called upon to suggest that a statute be enacted applying the common-law rule to deserters, authorizing their arrest, as in cases of felony, by private citizens or police officers, for the purpose of surrendering them to the proper authorities for trial.

CLAIMS OF OFFICERS AND ENLISTED MEN FOR LOSSES OF PERSONAL PROPERTY, UNDER THE ACT OF MARCH 3, 1885.

Seventy-two claims of officers and enlisted men of the Army for losses of personal property, under the act of March 3, 1885, 23 Statutes, 350, have been filed since the subject was presented to Congress in my annual report of last year. The claims vary in amount from \$13.64 to \$6,582.29. Two of the claims presented are for value of property lost on the steamship San Francisco in 1853, and although both claimants received from the Government the "eight months' pay and allowances" granted by Congress in the act of March 27, 1854, 10 Statutes, 269, as an equivalent for their personal property lost on that vessel, indemnity is now demanded for the specific articles alleged to have been lost. Both claims have been rejected by the Third Auditor of the Treasury, but under a ruling of the Second Comptroller the Secretary of War must first certify the articles which are "reasonable, useful, necessary, and proper," before a claim, however unjust, can be rejected by the accounting officers.

Several claims by officers for value of horses and equipments lost in the military service have also been filed. It is contended that these fall within the purview of this act, which, it is alleged, removes the limitations of the act of January 9, 1883, 22 Statutes, 401, for the adjudication of such claims. It would appear that the Secretary of War could with propriety under the act of March 3, 1885, certify such property (horses and equipments) to be "useful, necessary, and proper for such officers * * * while in quarters, engaged in the public service in the line of duty," and it seems to be desirable, in the consideration of this subject, now understood to be before the Committee on Military Affairs of the Senate, that the scope of the act should be more clearly defined. It is suggested there would be less difficulty if the entire adjudication of the claims should be lodged with the accounting officers in conformity to the provisions of section 236 of the Revised Statutes. A bill for the repeal of the act having been introduced and referred during the last session, this Department, pending the action of Congress, has suspended action upon the claims.

QUARTERMASTER'S DEPARTMENT.

For the construction of buildings and the enlargement of such military posts as in the judgment of the Secretary of War might be neces-

sary, the sum of \$265,000 was available for the fiscal year beginning July 1, 1885, under the appropriations of March 3, 1885, and previous years. After consulting the military commanders and the Quartermaster-General this sum was distributed as follows:

For San Antonio Barracks	\$75,000
For Fort Riley.....	30,000
For Fort Niobrara	30,000
For Fort Niagara	20,000
For Presidio Barracks	20,000
For the new post at Atlanta	75,000
For purchase of land at Atlanta	15,000
	<hr/>
	265,000

The title to the land required for the new military post at Atlanta, Ga., having been favorably reported by the Attorney-General, the purchase money (\$15,000) has been paid, and brick buildings for the post are now being erected.

The building in New York City known as the "Old Produce Exchange" has been purchased for the amount appropriated by the act of February 2, 1886, namely, \$250,000, the Attorney-General having approved the title to the same on the 24th of March. An appropriation of \$200,000 was also made for altering and remodeling the building. Upon examination the foundations were found to be defective, and it became necessary to reconstruct the entire building. The work is rapidly progressing and the cost will not exceed the amount appropriated.

No part of the money appropriated for the purchase of Fort Brown, Texas, has been expended, the parties having failed to offer a good and valid title.

The sum of \$199,096 has been expended for repairs upon buildings, &c., and one hundred and ten new buildings have been erected at a cost of \$211,120.

Under the authority of the act of July 31, 1882, to provide additional training-schools for Indian youths, twenty-three buildings at Fort Lapwai, Idaho Territory, have been transferred to the Department of the Interior; and five useless and abandoned military reservations, or parts thereof, have also been transferred to that Department in accordance with the provisions of the act of July 5, 1884.

The buildings and grounds at Newport Barracks, Kentucky, are flooded at each high stage of the Ohio River, and higher land is needed for a military post in that vicinity. It is hoped that Congress will make the necessary provision for this purpose at the coming session. This is a two-company post, and the Quartermaster-General informs me that if \$50,000 are appropriated this year for the purpose the necessary land can be purchased and the erection of the buildings begun.

The entire cost of Army transportation during the fiscal year was as follows :

For transportation of 236,180 persons, including 200,662 transported or ferried by Government vessels.....	\$266,401 38
For transportation of 7,907 horses and mules and 160,192 tons of freight.	975,793 93
Due for military transportation at close of fiscal year.....	337,258 27
For tolls, payment of employes, purchasing, maintaining, and operating vessels, purchase of draft animals, construction and repair of wharves, bridges, &c.....	1,501,125 58
	<hr/> 3,080,579 16

The Indian troubles in Arizona and New Mexico and the operations in the Oklahoma country have increased transportation expenses and compelled the strictest economy. Many wants of the service have been denied and movements of troops postponed which otherwise would have been ordered.

The expense of military transportation, not paid from the regular appropriations, includes that over the bonded Pacific railroads, amounting to \$488,761.06. This sum is credited at the Treasury on the debt of those roads due the United States. I quote the words of the Quartermaster-General on the subject of these railroads, showing that a special appropriation of \$906,314.42 is required to carry into effect the decision of the Supreme Court in the case of the Central Pacific Railroad Company v The United States. The subject is fully set forth in House Ex. Doc. 270, Forty-ninth Congress, first session :

The accounts of the bonded Pacific railroads are adjusted under the following statutes: Act March 3, 1873; act May 7, 1878; act March 3, 1879. Settlements for services on the unsubsidized portions of the Union Pacific Railway, including the Kansas Division (formerly the Kansas Pacific), and the Denver Pacific Railroad and Telegraph Company, the Central Branch Union Pacific Railroad, and the Sioux City and Pacific Railroad, continue to be made the same as during the past fiscal year. Settlements for services over the unsubsidized portions of the Central Pacific Railroad have heretofore been held subject to the provisions of Treasury circular letter dated January 12, 1884, under which the amounts were certified by the accounting officers and reported to the Secretary of the Treasury, subject to the disposition of Congress. No action having been taken by Congress in reference to the disposition of the amounts embraced in the settlements held in abeyance, a motion was made by the company before the accounting officers of the Treasury, by which, in effect, the revocation of the order of January 12, 1884, and the revival of the enforcement of that of June 27, 1883, was requested. The Second Comptroller, in a decision thereon, dated August 28, 1885, which was approved by the Secretary of the Treasury, and published in Treasury Circular No. 136, dated September 11, 1885, directs the revocation of Department Circular No. 83, of June 27, 1883, and circular letter of January 12, 1884, and that all compensation now due or which may hereafter become due the Central Pacific Railroad for services rendered the Government be withheld and applied, one-half upon interest account and the other half credited to the sinking fund, as required by act of May 7, 1878; also that hereafter the accounts of the company be adjusted by the accounting officers, the Secretary of the Treasury retaining the whole amount, applying the same in the manner as provided by that act. It is understood that on application

of the company the Secretary of the Treasury consented to suspend action under that part of his order directing the withholdment and application of compensation due or to become due the company, upon the condition that the matter in issue be presented to the proper courts for judicial decision. In conformity thereto a petition of the Central Pacific Railroad against the United States, No. 14,711, was filed in the United States Court of Claims, November 24, 1885, to recover compensation for services performed for the United States in transportation over those portions of the road as above mentioned, in the building of which it had not been aided by the Government and therefore not embraced in the above-named act. The United States demurred on the ground that the whole of said compensation is required to be retained under the provisions of the second section of the act May 7, 1878, chapter 96 (Thurman act), 20 Stat., page 58. The decision of the court was that the provisions of the act applied only to services over the aided portions of the road, and the demurrer was overruled. An appeal was taken to the Supreme Court of the United States (October term, 1885), and decision rendered May 10, 1886, sustaining the railroad company in its construction of the second section of act of May 7, 1878, that cash payment for services over the unsubsidized roads should be made by the United States. The Secretary of the Treasury, in circular of June 4, 1886, invited attention to decision referred to, and directed that thereafter the accounts and claims of the company for such services shall be settled, adjusted, and paid in conformity to such decision, and that all Department circulars heretofore issued upon the subject are modified accordingly. On the suggestion of the honorable the Secretary of the Treasury, and by direction of the honorable the Secretary of War, the Quartermaster General, on June 7, 1886, submitted the estimates of appropriations required to execute the decision of the Supreme Court, aggregating \$906,314.42. (See House Ex. Doc. 270, Forty-ninth Congress, first session.) The appropriation was, however, refused by Congress. (See House Report No. 3109, Forty-ninth Congress, first session.)

In view of the circumstances here reported, and the fact that the estimates upon which the regular appropriations of the Quartermaster's Department entitled "Transportation of the Army" were based carefully excluded any provision for payment of money to the bonded Pacific railroads, for the reason that the laws as interpreted by the accounting officers of the Treasury and the Department of Justice, at the time of the preparation of the estimates, prohibited any payment to these companies, it is thought that the Army transportation appropriation should not be used in payment of any accounts of these companies, but that a special appropriation from Congress for the purpose should be secured. As a matter of fact, the appropriation for transportation of the Army will be hardly sufficient to meet the usual demands of the service, as contemplated in the preparation of the estimates of the amount needed for the purpose.

The average cost of cavalry and artillery horses during the year was \$141.24; of draft horses, \$205.85, and of mules, \$154.99 per head. At the close of the fiscal year there were on hand 8,609 cavalry and artillery horses, 454 team horses, 5,493 mules, and 6 oxen. The veterinary supplies purchased this year cost \$2,266.95, a saving of \$11,065.33 as compared with last year. This is due to the revision of the supply table and the purchase of the supplies from the Medical Department.

There were 1,552 miscellaneous claims and accounts acted on during the year, amounting to \$532,160.85, leaving on hand July 1, 1886, 10,669 miscellaneous claims and 249 accounts, amounting to the sum of \$8,516,715.59. The agents of the Quartermaster's Department have investigated and reported upon 2,906 claims of loyal citizens for quartermaster's stores, filed under the act of July 4, 1864. The Quartermaster-

General has taken final action upon 3,767 of these claims during the year, and on July 1, 1886, there were 4,983 awaiting action.

The following table exhibits the entire number and amount of claims filed under the act :

Number of claims presented to June 30, 1886.....	57,821
Number of claims allowed.....	18,329
Number of claims disallowed.....	34,509
	<hr/> 52,838
Number on hand July 1, 1886.....	4,983
	<hr/>
Amount of 57,821 claims presented.....	\$39,811,886 99
Amount of 52,838 claims acted upon.....	35,195,309 04
	<hr/>
Claims on hand (4,983).....	4,616,577 96

The clothing and equipage for the Army are obtained by contract or by manufacture at the quartermaster's depots at Philadelphia, Jeffersonville, and San Francisco. The boots and shoes are manufactured at the military prison at Fort Leavenworth, Kansas. These supplies have given general satisfaction.

In the eighty-two national cemeteries there are 323,947 interments.

Contracts are about to be made for the construction of the roads authorized by Congress at its last session to the Chalmette, Knoxville, and Natchez national cemeteries. When these are completed there will be nine roads constructed under special authority of law, for the maintenance of which there is no appropriation. Some are almost impassable for want of repairs. The road to the Vicksburg national cemetery could have been kept in good order for a few hundred dollars expended as required; it will now cost \$10,000 to restore it to good condition. An estimate has been submitted for the maintenance and repair of these roads.

SUBSISTENCE DEPARTMENT.

The report of the Commissary-General of Subsistence is very satisfactory and contains the usual financial exhibit of the operations of the Subsistence Bureau for the fiscal year 1886, and other statistical matter relating to the conduct of its affairs.

The Army ration is ample in quantity, excellent in quality, and the utensils for cooking it are all provided; but it is not cooked as it should be, for want of proper skill. This is one of the great wants of the service, as reported both by the Commissary-General and the Surgeon-General, and nothing would add so much to the comfort and health of the troops as a corps of good cooks; accordingly I unite with the Commissary-General in recommending that legislative authority be granted for the enlistment of one cook for each troop, battery, and company, and each general depot of recruits, and of a baker for each garrisoned post.

MEDICAL DEPARTMENT.

The Acting Surgeon-General gives a financial statement of operations of the Medical Department for the fiscal year ending June 30, 1886.

He recommends that existing laws relative to the issue of trusses be so amended that every person who has been or who may hereafter be ruptured in the line of duty in the military or naval service of the United States shall be entitled to a truss. The money value of medical and hospital supplies actually issued during the fiscal year was \$168,119.06; the cost of supplies for the current year will probably exceed that amount. The limit of the amount of appropriation to be expended for pay of employés of the Medical Department should be increased to \$46,000, rendered necessary by needed increase of force in purveying depots; and he also recommends, as for the best interests of the service and in view of economy, that Congress be requested to grant authority to make purchases of medical and hospital supplies costing less than \$500, after the usual advertisements, but without entering into the formal written contract now required, as in many cases the expenses entailed thereby are equal to the cost of the article.

The number of admissions to sick-report during the past year was 32,990, or 3,839 less than for the preceding year, while the ratio of cases to mean strength was considerably lower, being as 1,367 is to 1,532. There were during the year 182 deaths from all causes, 115 from disease, 67 from injuries, or a ratio per 1,000 of mean strength of 7.5, against a ratio of 10.9 for previous year. It is a matter of congratulation that not only the admission-rate to hospital but also the death-rate has fallen to a lower point than at any time within the history of the Medical Department. There were 757 discharges for disability during the year, a decrease as compared with the previous year.

The past year has been one of exceptional freedom from disease and epidemic, though one of unusual activity and severity for the troops engaged in military operations on the southwest frontier. The principal causes of disability in the past year have been injuries, diarrheal diseases, diseases of respiratory system, malarial diseases, rheumatism, venereal affections, and the acute infectious diseases. Enteric or typhoid fever, which for several years has had an epidemic tendency, shows a decided decrease, 76 cases being reported against 156 in preceding year. Venereal diseases also show a decrease: 55 per 1,000 against 65 per 1,000 for preceding year. Among the acute infectious diseases, are reported chicken-pox, dengue, diphtheria, measles, mumps, scarlet fever, and one case of typhus fever.

The rate of mortality, as shown in the different arms of the service, place the cavalry first, infantry second, and artillery third. But little difference is shown in the death-rates for commissioned officers and enlisted men, the rates for the former being 7 and for the latter 7.1 per

1,000 of mean strength. The age of greatest mortality was for commissioned officers, the period between 50 and 56, and for enlisted men between 56 and 60. Among native-born white troops, 86 deaths occurred, or 6.4 per 1,000 of strength; among foreign born, 82 deaths, or 7.9 per 1,000; among colored troops, 14 deaths, or 5.9 per 1,000.

There were returned during the year 6,016 cases of injuries; of which 3,393 were not of a serious nature, but contributed materially to the non-effectiveness of the troops. Deaths from wounds or other violent causes numbered 72, being 2.95 per 1,000 of strength; the rate for the previous year was 3.45 per 1,000. The casualties occurring during the campaign against the hostile Apaches embrace 1 officer, 4 enlisted men, and 2 Indian scouts killed; 1 officer, 4 enlisted men, and 3 Indian scouts wounded; a total of 7 killed and 8 wounded. Assistant Surgeon T. J. O. Maddox, U. S. Army, was killed in the affair at Little Dry Creek, New Mexico, December 19, 1885. In addition to the casualties of battle 8 men were instantly killed at the rifle range, 3 were discharged on account of wounds received during rifle practice, and 12 less severely wounded were returned to duty. Nineteen cases of injury are also reported from explosion of cartridges, all of which were returned to duty. Two cases of homicide, 9 of suicide, and 8 of accidental shooting are also reported. During the year 184 surgical operations are reported, 85 consequent upon injuries received, and 99 for relief of surgical diseases; of these operations, 179 resulted in recovery and 5 proved fatal.

Very complete reports of the examination of recruits for the Army have been received from 129 military stations and 25 recruiting rendezvous and depots. These reports show examinations of 16,805 applicants for enlistment; of this number, 72,44 men were accepted. By far the most frequent causes of non-acceptance were imperfect mental and physical development and general unfitness.

The total number of official calls upon this office during the year for information in pension applications was 55,111, being 9,344 more than similar applications during the previous year. Replies have been furnished to the proper authorities in 49,879 cases, of which 7,473 were to the Commissioner of Pensions, 40,043 to the Adjutant-General of the Army; 8,581 remain to be searched and reported on. During the year 27,449 folios of worn and dilapidated hospital registers of sick and wounded were copied and preserved from destruction.

The total accessions to the museum collection during the past year were 1,355 specimens, illustrating medicine, surgery, anatomy, physiology, and microscopy. It is very desirable that a catalogue of the museum should now be published; such a catalogue, with proper illustrations, will make three large volumes and will be of great benefit to the medical profession. It is recommended that authority be granted by Congress for printing this work. There have been added to the library of this office during the year 4,513 books and 10,708 pamphlets; making a total collection of 76,732 books and 106,631 pamphlets.

Volume VII of the Index Catalogue has been published and is in course of distribution ; manuscript for the eighth volume is in course of preparation, and the first part is now going to press. The manuscript of the third medical (and final) volume of the Medical and Surgical History of the War is now in the hands of the printer, and the volume will probably be issued in the coming spring.

Increased attention to the hygienic needs of the soldier and to the subject of sanitation at all military posts, with gratifying results, is shown in the monthly sanitary reports received at this office, and to the diminished rates of sickness and mortality for the year. The cheerful and appreciative co-operation of commanding officers in this matter is also especially gratifying. It is urged that means be devised for the proper instruction of army cooks, as an essential to the physical and moral well-being of the troops. Five ice machines have been ordered for posts in the intensely hot regions of Arizona and Texas; it is hoped and believed that they will secure to the garrisons so situated a much-needed comfort and to the sick an indispensable necessity.

There are now four medical officers who have been recommended for retirement, and at least six others who can do no more active service. The interests of the Department demand that their places should be filled by young and active men, and it is hoped Congress may be induced to afford relief by special or general legislation.

Attention is invited to the failure of Congress to appropriate money for the payment of extra-duty pay to enlisted men detailed as cooks and nurses in post hospitals. As this service is absolutely necessary for the welfare of the sick of the Army, it is hoped that Congress will be pleased to make provision for the payment of such services as may be rendered gratuitously during the current year.

The necessity for the organization of a hospital corps, by the enlistment of able-bodied and intelligent men, who shall be thoroughly trained as cooks, nurses, attendants, and litter and stretcher bearers, is becoming yearly more imperative, and the detail of a board of competent medical officers to prepare a plan of organization for such a corps, suitable to the condition of our Army, with a view to Congressional action, is strongly recommended.

The bill to increase the efficiency of hospital stewards of the Army, in accordance with the recommendation made in the last annual report, has passed the Senate and has been favorably reported from the Military Committee of the House of Representatives. It is hoped that this bill, affecting this valuable class of non-commissioned staff officers, will become a law at an early date.

The contract entered into with Providence Hospital for the support and treatment of transient paupers, pursuant to the act of March 3, 1885, has been satisfactorily fulfilled by that institution.

Seven candidates for the position of assistant surgeon, United States

Army, have passed successfully an examination before the Army Medical Examining Board. Their names have been submitted to the Secretary of War for appointment as assistant surgeons, and five have thus far received such appointments, leaving two to be appointed as vacancies may occur.

ARMY MEDICAL MUSEUM AND LIBRARY.

By act of Congress approved March 2, 1885, the sum of \$200,000 was appropriated for the construction of "a brick and metal fire-proof building to be used for the safe-keeping of the records, library, and museum of the Surgeon-General's Office of the United States Army."

The work on this building has proceeded steadily under contract. The walls of the main building and annex have reached the top of the main cornice, and one-half of the roof trusses of the west wing have been put in place. It is hoped that the roofs of the buildings will be completed and the heating apparatus put in, so that the interior may be plastered during the coming winter.

ARMY AND NAVY HOSPITAL, HOT SPRINGS, ARK.

Since the date of the last annual report, work upon the Army and Navy general hospital at Hot Springs, Ark., has been much delayed by want of funds to complete the buildings and place them in condition for occupation. By the act of Congress making appropriation to supply deficiencies for the fiscal year ending June 30, 1886, and approved August 4, 1886, the necessary funds were provided, and the hospital will be completed and in condition to receive patients about the 1st of December. As required by the act of June 30, 1882, the President has promulgated rules and regulations for the government of the hospital.

PAY DEPARTMENT.

The disbursements of the Pay Department during the fiscal year ending June 30, 1886, amounted to \$13,444,733.15, without loss resulting to the Government.

There is little of general interest to notice in this report. The enlisted men are manifesting a greater interest in the deposit system authorized by the act of May 15, 1872, the sum of \$469,031.55 having been deposited the last fiscal year, an increase of \$41,413.59 over the amount of the previous year. The sum which the soldier who serves through several enlistments may be able to deposit is in many cases very large; in several instances soldiers have amounts exceeding \$3,000 to their credit. Every new deposit affords a guarantee for the good conduct of a soldier, and is a practical security against his desertion, for if he deserts he forfeits his deposit.

ENGINEER BUREAU.

During the past year work in connection with fortifications has been restricted to that necessary for their preservation and repair. This whole subject has been elaborately and carefully treated in the report of the Board on Fortifications or other Defenses, submitted at the last session, to which I again invite the special attention of Congress. The utterly defenseless condition of our sea-coast and lake frontier is now well understood by every civilized nation in the world, and immediate action should be taken to prevent the disastrous and humiliating results that might follow a declaration of war with the most insignificant of foreign powers possessing guns and ships of modern construction.

What is needed for the defense of our sea-coast may be briefly stated. The principal cities named in the report of the Board on Fortifications should be fortified, and work on those most important should be begun at once, viz: New York, San Francisco, Boston, and Washington. The defenses required must be erected and prepared to resist attack from the water. For the great ports of Europe such defenses must also be arranged to resist the attack of armies by land. But no considerable army will, in all human probability, cross the sea and attempt the invasion of our territory at these populous points. War vessels would be sufficient for such attacks; and, besides, armies can be rapidly raised and armed by us for defense against troops. We have, therefore, a single problem to solve in defending our cities: How best to resist and silence the armored ships and the steel guns and mortars of modern construction. It can only be accomplished by guns of equal force to those which any enemy can bring against us, and by torpedoes or submarine mines laid in the navigable channels, both so guarded and protected that they can do efficient service when required. We have no gun now which can stop the progress of or do any material injury to a well-armored ship. The manufacture of a gun is a work of time, and of a long time, and cannot be extemporized when wanted. Torpedoes may be more quickly created, but still time and money are needed for their construction. It has been said by a well-informed writer on the subject that it is a matter of doubt if we have on hand enough cables and cases to control with torpedoes the channels past Sandy Hook alone.

The work has been thoroughly considered and laid out, and the Engineer and Ordnance Corps of the Army are ready to begin, and only wait for the appropriations from Congress.

While there have been some differences of opinion in regard to the best methods of preparing armor-plate for fortifications, requiring still further study and experiment, there is no reason why this should delay the beginning of the important work of fortifying our great harbors. The preparation of sites and masonry foundations for batteries, casemates, and turrets, and also the construction of submarine mines, and of

earthen batteries for rifled mortars, are works equally necessary as the work of procuring the best armor, and can be constructed before the armor-plate is required.

Owing to the failure of appropriations for the present fiscal year, either for fortifications or torpedoes, experiments on torpedoes have been suspended, which had gradually developed a system of fixed mines, which, if appropriations are renewed, promises to produce the best results. In the present condition of the sea-coast defenses, a detailed description of which is contained in the report of the Chief of Engineers, our main reliance in case of war would be on fixed mines. The number on hand is insignificant, and the preparations for operating them have yet to be made.

I would also invite attention to the necessity for keeping in the service at all times a sufficient force of engineer soldiers, well instructed in their duties as a torpedo corps and able to place torpedoes in position before an enemy's fleet could arrive in front of one of our important harbors. The practical instruction of our engineer troops in the details of this special service has to a great extent, through want of appropriations, been suspended and their efficiency thereby much impaired.

I also desire to call attention to the needs of the Engineer School of Application at Willets Point. This establishment, where the torpedo experiments are carried on, is doing excellent work in preparing lieutenants of engineers and of artillery as experts in torpedo warfare. It is of the first importance that appropriations should be made as requested for the school, for water sewage, additional quarters for officers, and the other items mentioned in the estimates already submitted to Congress.

The funds with which the works of river and harbor improvement were prosecuted during the fiscal year ending June 30, 1886, were, owing to the failure of appropriations during the second session of the Forty-eighth Congress, derived mainly from such balances as remained on hand from the appropriations of the act of July 5, 1884, and in many instances, these being only sufficient for the care of the public property appertaining to the works, operations were necessarily suspended. The report of the Chief of Engineers sets forth the condition of each improvement, the extent of the work performed during the last fiscal year, the amount of money expended, and, in compliance with the provisions of the river and harbor act of March 2, 1867, estimates of the amount that can be profitably expended during the fiscal year ending June 30, 1888, with the probable cost of completion.

The examination and surveys at places required and provided for in the river and harbor act of August 5, 1886, have been assigned to the officers in charge of the several river and harbor districts. Reports thereon will be transmitted to Congress from time to time during the ensuing session.

A statement is given in the report of the Chief of Engineers of the action taken during the year upon such plans and locations as were submitted, by parties interested, of bridges proposed to be built over navigable waters under authority of Congress, subject to the approval of the Secretary of War. Examinations were also made, whenever requested by committees of Congress, of proposed bills authorizing the construction of bridges, upon which the views of the War Department were desired; of bills so examined during the last session of Congress fifteen originated in the Senate and forty-three in the House of Representatives. A statement is also given of the work accomplished in the removal of wrecks obstructing or endangering navigation, general provision for which is made in the river and harbor act of June 14, 1880, enlarged by provisions of the river and harbor act of August 2, 1882.

In consequence of the provisions of section 2 of the river and harbor act of July 5, 1884, which require the Secretary of War to report to Congress whether any bridges, causeways, or structures erected or being erected interfere with free and safe navigation, and, if so, to report the best mode of altering or constructing them, the Chief of Engineers was instructed to submit reports covering all facts necessary to enable a compliance with the terms of the act, and a communication enumerating all instances reported to date, of interference with free and safe navigation was transmitted to the Senate December 18, 1885.

The small appropriation asked for the next fiscal year for surveys required for military purposes and for the publication of maps for the use of the War Department is earnestly recommended.

IMPROVEMENT OF SOUTH PASS, MISSISSIPPI RIVER.

In the last annual report of the Department the record of this work was brought down to September 9, 1885. The channel has been maintained as required by law for a full year within the period from September 10, 1885, to September 26, 1886, both dates inclusive, for which Mr. Eads has been paid \$100,000, and also \$50,000 for one year's interest on the \$1,000,000 retained, making the total expenditures to September 26, 1886, inclusive, \$5,300,000. During seventeen days of this time there was not a legal maintenance of the channel, for which period no payment has been made.

The funds appropriated by the act of July 5, 1884, for testing the depth of water and width of channel were exhausted at the end of November, 1885, and the employes voluntarily continued work for seven months without pay, relieving the Government from any obligation unless Congress should appropriate funds for the purpose. As the law requires the examinations and surveys, in order that payments may be made to Mr. Eads for the legal maintenance of the channel, it is recommended that the appropriation for the expenses thereof be made as an independent measure.

WATER SUPPLY OF WASHINGTON, D. C.

The work for increasing the water supply of Washington, D. C., has been continued. The dam across the Potomac River at Great Falls is nearly completed, and the whole work will be finished during the present season. The tunnel has been excavated for a distance of 5,040 feet, making the whole length of excavation 18,538 feet, and leaving unfinished 2,150 feet at the close of the fiscal year. The sum provided in the general deficiency appropriation for continuing this work is \$395,000. The ultimate cost of completion, however, will probably exceed this amount, in consequence of the suspension of the work, which continued for a period of six months, the available funds having been exhausted February 1, 1886. Work on the reservoir was continued during the year, and it is believed that the amount appropriated in the general deficiency act, viz, \$160,000, will be sufficient to complete it in all its essential features.

RECLAMATION OF THE POTOMAC FLATS.

The project for the improvement of the Potomac River in the vicinity of Washington was adopted by act of Congress of August 2, 1882, and has for its object the improvement of navigation, the establishment of harbor lines, and the elevation of the flats in front of the city. The expenditures for the improvement have thus far amounted to \$739,574.

The work has been retarded by the great number of freshets occurring during the year, and by the failure to make an appropriation in 1885. It is of the utmost importance that large appropriations should be made in the early stages of a work of this character and magnitude. It is now in such a state of progress that it is liable to great damage from freshets, and it should be pushed rapidly to a point nearer completion. The sum of \$700,000 could be profitably expended during the fiscal year ending June 30, 1888, in continuing the work in accordance with the project.

BRIDGES OVER NAVIGABLE WATERS.

In view of the urgent necessity for legislation to prevent the obstruction of the navigable waters of the United States, I quote the remarks upon the subject in my last annual report:

Under the act of Congress of July 5, 1884, the city of Saint Paul was authorized to construct bridges across the Mississippi River at that city, upon plans subject to the approval of the Secretary of War. The plans of a bridge designed to be erected by the city were submitted to me for approval in March last, according to the provisions of the act. After consultation with the Chief of Engineers I was unable to approve them; but at the request of the authorities of Saint Paul I submitted the question to the Attorney-General, and in his opinion the plans were not in conformity to the provisions of the act. During this investigation it appeared that directly below the main span of the proposed city bridge, which, in accordance with the act, was 300 feet in width, there had been erected in the middle of the navigable portion of the

stream, by the Minnesota and Northwestern Railroad Company, a large pier 40 feet in width, which was to form a part of a bridge across the river about to be built by that company. This fact was accordingly reported to the Attorney-General, who replied that "in the existing state of the law the facts of the present case afford no ground for a judicial proceeding on behalf of the United States against the railroad company, and that until Congress makes some adequate provision upon the subject the officers of the United States can in this case take no action to enforce the rights of the Government and give effect to the duty resting upon it to protect the navigation of the Mississippi River." This railroad bridge above referred to has not been officially reported upon by the Engineer Department, because, not having been authorized by act of Congress, it is not under the jurisdiction of this Department; but it is believed to be an obstruction to navigation. The railroad company claims authority to erect it under the act of the Territorial legislature of Minnesota of 1854, and asserts that the authority to build bridges across the Mississippi River and its tributaries within the State of Minnesota under the authority of the laws of that State has been exercised in several cases.

The Attorney-General, in the decision above referred to, remarks: "As the Mississippi River above, at, and for some distance below the city of Saint Paul is wholly within the State of Minnesota, the principle enunciated by the Supreme Court of the United States in *Wilson v. the Blackbird Creek Marsh Company* (2 Pet., 250); *Gilman v. Philadelphia* (3 Wall., 713); *Pound v. Turck* (95 U. S., 459); and *Escanaba Company v. Chicago* (107 U. S., 678) applies to this case, namely, that until Congress acts and by appropriate legislation assumes control of the subject, the power of a State over bridges across navigable streams within its limits is plenary."

The only general power which the Secretary of War has to act in the matter of bridges which obstruct navigation is found in section 8 of the river and harbor act of July 5, 1884. This law does not prevent the erection of bridges which obstruct navigation, but prescribes that the Secretary of War shall require such aids to the passage of the draw-openings or raft-spans of such bridges as he may deem necessary.

This recital discloses the fact that a private corporation, acting under the authority of a Territorial act, is obstructing the main navigable channel of the Mississippi within a few hundred feet of the spot where Congress, in authorizing the city of Saint Paul to build a bridge, provided there should be a span over the channel leaving a clear water-way of not less than 300 feet in width. It has been thought proper to call the attention of Congress to this question.

This pier is an obstruction to navigation, and would seem to fall within that class of cases which it is the duty of the Secretary of War to report to Congress under the last paragraph of section 4 of the river and harbor act of August 5, 1886.

ORDNANCE DEPARTMENT.

The national armory at Springfield, Mass., during the last fiscal year manufactured 39,527 rifles, carbines, and shot-guns, in addition to the repair of arms, the manufacture of swords, sabers, and other miscellaneous articles. The magazine guns issued to the Army for trial last year were thoroughly tested in competition with each other and with our present arm, the Springfield rifle. The result was declared to be strongly in favor of the Springfield, in preference to any of the others. The remarks of the Chief of Ordnance on the subject are very much to the point:

"After a careful examination of these reports I am satisfied that neither of these magazine guns should be adopted and substituted for the Springfield rifle as the arm of the

service. I have been and am an advocate for a magazine gun, but it would seem the part of wisdom to postpone for the present any further efforts towards the adoption of a suitable magazine arm for the service. The Springfield rifle gives such general satisfaction to the Army that we can safely wait a reasonable time for the further developments of magazine systems."

The new model rod-bayonet Springfield rifle, with improved sight, is now upon trial in the hands of the troops. Our metallic ammunition, already very excellent, has, during the past year, been materially improved.

The demands upon the Ordnance Bureau for materials for rifle practice have very much increased, showing a great interest throughout the Army in this important branch of a soldier's education. All demands have been promptly and liberally met, so that the rifle ranges at posts throughout the country are now better equipped than ever before. The facilities offered to our soldiers in this respect are, it is believed, greater than those enjoyed by other armies.

Captain Lyle of the Ordnance was sent last spring, under orders of the War Department, to Spezia to witness the trial of Gruson's chilled-iron armor. The trial demonstrated the ability of this armor to successfully withstand the impact of forged-steel projectiles fired from the heaviest guns.

It is hoped that Congress will take action, during its next session, to place the Army on an equal footing with the Navy in the matter of the manufacture of guns. The Gun Foundry Board earnestly recommended that the Government establish two gun factories, one for the Army and the other for the Navy. The Board on Fortifications or other Defenses indorsed this recommendation, and Congress gave partial effect to it by legislation which has enabled the Navy Department to establish a factory at the Washington navy-yard. The Senate passed a bill at the last session containing, among other valuable provisions, the establishment of an Army gun factory at Frankford Arsenal. This bill, however, did not obtain the concurrence of the House of Representatives, and is still in conference. It is hoped that it will be passed at the coming session.

With the exception of work on existing contracts, continued from last year, the operations of this Department with regard to the armament of fortifications have ceased, owing to the failure of the fortifications appropriation bill to become a law. This has caused serious injury, not alone from the stoppage of work but also from the loss of skilled workmen, who have been discharged for lack of funds to pay their wages. It affects the Government, as well as the Army, for the economical, as well as the efficient, performance of technical work, forbids its being done in an intermittent manner. There will be great difficulty in procuring good men upon a resumption of work, for those formerly employed will have sought employment elsewhere.

Owing to the failure of the bill mentioned to become a law, the completion and test of the various experimental guns, the development of

powders and explosives, the alteration of carriages for existing guns, and nearly all the work of the ordnance proving-ground have been suspended, and much valuable skilled labor for a long time employed at that station has been lost to the Government. During the past year experiments were continued with the 12-inch cast-iron B. L. rifle, until 137 rounds were fired. It was then found that the erosion of the bore was so great that the gun was thought to be unsafe. The result of the firing was to show that the power of this gun is about equal to that of the 10½-inch steel rifle, which is 21.5 tons less in weight.

Experiments upon rifled mortars to determine the comparative merits of the breech and muzzle-loading systems still continue.

It is gratifying to state that the results of trials and tests of powder and of steel for gun making, furnished from the Du Pont, Midvale, and Cambria Works continue to fully answer our expectations, so that there is no reasonable ground to doubt that these two important branches of military industry, upon which reliance must be had in case of war, can with due encouragement from Congress be brought to the highest standard maintained abroad.

I deem it my duty to invite attention to the present state of our field artillery. The Chief of Ordnance reports 500 serviceable 3-inch wrought-iron M. L. guns on hand, in addition to the new steel 3.2-inch guns, of which 25 will be completed by the end of November. There are practically no carriages for any of these guns. The wooden carriages made years ago for the wrought-iron guns are no longer serviceable, and if serviceable would not answer for the new steel guns. The metal carriages designed for the latter will serve equally well for the iron guns, and can be replaced by the steel carriages as fast as supplied. At present the needs of our field artillery are most pressing.

Experiments with the Powlett pneumatic gun-carriage, and with steel siege guns, and experiments to develop an effective system of defense for torpedo lines, have been carried on during the year, and still continue.

The law makes it the duty of the Secretaries of War, Navy, and Interior to cause and require every contract made by them severally on behalf of the Government, or by their officers under them appointed to make such contracts, to be reduced to writing and signed by the contracting parties, with their names at the end thereof.

It is to be observed that this applies to every contract, without regard to its amount or the time of delivery of the articles to be bought. There are numerous small contracts for which proposals must therefore be invited by advertisement, many of them for amounts less than \$500, and where immediate delivery is required. The reduction of such contracts to writing not only delays the public business, but is a matter of additional expense to the Government. Each contract is made in triplicate; one copy is retained by the officer, the second by the contractor, the third is sent to the chief of the proper bureau of the War

Department, the fourth goes to the proper accounting officer, and the fifth is filed in the returns office of the Department of the Interior, with all the copies and papers in relation to such contracts attached together by a ribbon and seal, and marked by numbers in regular order according to the number of papers composing the whole return, to which is affixed the oath of the officer making the contract as required, secs. 3709, 3744, 3745, Rev. Stat. This involves a great deal of clerical labor, and the public interest does not require these elaborate formalities in making purchases of less than five hundred dollars.

In accordance with the requests of the Chief of Ordnance and the Acting Surgeon-General, I recommend that section 3709, Revised Statutes, be amended by inserting after the word "services" in the first line, the words "in excess of five hundred dollars," as follows:

SEC. 3709. All purchases and contracts for supplies or services in excess of five hundred dollars, in any of the Departments of the Government, except for personal services, shall be made by advertising a sufficient time previously for proposals respecting the same, when the public exigencies do not require the immediate delivery of the articles, or performance of the service. When immediate delivery or performance is required by the public exigency, the articles or service required may be procured by open purchase or contract, at the places and in the manner in which such articles are usually bought and sold or such services engaged between individuals.

The law now allows purchases in open market to the amount of five hundred dollars to be made by the Interior Department. Stat., 1885-'86, p. 46.

THE CHIEF SIGNAL OFFICER.

The course of instruction at Fort Myer of officers and enlisted men was continued during the year, providing for the theoretical and practical information in the duties required of the Signal Corps in time of war, and also for the meteorological service.

The importance of this branch of the military service was shown during the recent Indian campaign in Arizona, where three small detachments sent to General Miles rendered valuable service.

The weather forecasts have been regularly issued during the year, and the increasing demand for them may be taken as evidence of their value.

The progress made in the system of cold-wave warnings has been highly satisfactory, and the Chief Signal Officer is convinced that property to the value of many millions of dollars has been saved through its agency. He recommends "that the sum of \$5,000 be expended for the extension of the system, to be added to the estimates for the fiscal year ending June 30, 1887."

The number of stations in operation June 30, 1886, was 452. Daily telegraphic reports are received throughout the year from 160 stations; from April 1 to October 31, from 135 cotton-region stations, and from 69 special river stations in times of flood, and the remainder report monthly by mail. In addition, reports are received throughout the year from 24

Canadian stations by the co-operation of the Canadian meteorological service, from 288 volunteer observers and Army surgeons at military posts, from 294 foreign stations, and from 616 naval and merchant vessels.

The Chief Signal Officer states that the value of the Weather Bureau to the country would be largely increased by further extensions of the facilities for distributing the weather forecasts, and by increasing the number of stations, and for that purpose he recommends "that an addition of \$10,000 be made to the estimates for the fiscal year ending June 30, 1888."

The work of watching, recording, and giving timely warning, by telegraph, of the rise and fall of rivers is an important feature of the service, and by its agency much valuable property has been saved. During the year the system of reports has been reorganized and extended. These reports are not only valuable in time of flood, but they also serve a valuable purpose in time of low water, enabling shippers to direct the movement of their vessels at the different points along the river course.

The system of reports for the benefit of the cotton interests has been continued under many disadvantages, owing to the small appropriation made for this work. As this service is of great importance to those specially interested, a sufficient appropriation should be made for increased pay of observers and for prompt telegraphic work.

There are 2,361 miles of military telegraph lines now operated by the Signal Service. The sea-coast line, which extends along the Atlantic from the neighborhood of Boston to the Cape Fear River, not only secures meteorological reports from exposed points, but has served to communicate messages whereby prompt assistance has been rendered to vessels in distress, and many lives and valuable cargoes have been saved. This line should be extended along the entire Atlantic coast, thus adding to the efficiency of the Signal Service and assisting the Life-Saving Service in the performance of its humane work.

The laying of the cable, authorized by Congress, connecting Nantucket with the mainland has been completed, and telegraphic communication with the island is now established.

The system of special frost warnings for the benefit of the tobacco, cranberry, sugar, raisin, and fruit-growing districts has continued in operation as organized in 1882.

The organization of State weather services, co-operating with the Signal Service, has met with encouragement, and the evident value of such organizations in affording means for the rapid distribution of the weather forecasts, without expense to the General Government, has led to the extension of the system during the year in States where it had not previously been in operation.

The Chief Signal Officer is of opinion that meteorological observations are of the first importance at points where it is impossible from the expense involved to maintain regular stations, the cost of which would

amount to \$1,000 and more per annum. These observations can be obtained if the necessary instruments are furnished. These would not cost more than \$250 at each station, and the importance of the service is of much more value than the entire cost of the instruments. There is no provision of law under which public property can be issued for this work, but it has been the custom since the organization of the Signal Service to loan such meteorological instruments as are necessary to secure observations for the Signal Service from voluntary, that is, unpaid, observers. This plan I consider, under existing laws, of doubtful legality and I would, therefore, recommend that Congress authorize the loan of instruments in such cases, the Department taking a bond to secure their safe return.

As bearing upon this subject I would invite attention to the following extract from report No. 2740 of the House of Representatives, Forty-ninth Congress, first session, page 25 :

The Commission believe that a considerable expenditure could be saved, both in the number of employes as observers, as well as the expense of stations, by rearranging both, so as to utilize fully State organizations of the weather service, and also the universities and colleges of the country. These would furnish the necessary reports in many cases with absolute regularity if allowed a small sum in addition to the cost of telegraphing and the instruments necessary to take the observations ; but this is a matter of administration that should be supervised by the Chief Signal Officer under the direction of the Secretary of War, and can easily be done without further legislation.

Signal Service agencies for the benefit of commerce and the marine interests have been maintained during the year at New York City, Boston, and Philadelphia.

Detailed reports of special work under the scientific assistants accompany the Chief Signal Officer's report.

The service continues its co-operation with boards of trade and other commercial organizations in the large cities, and has received from them valuable assistance in making the Signal Service more valuable throughout the country.

In connection with the operations of the Lady Franklin Bay expedition, the Chief Signal Officer suggests that Congress should recognize the successful work performed by Lieutenant Greely and his party, by providing promotions of the survivors and support for the families of those who lost their lives while serving with this expedition.

The Chief Signal Officer invites attention to the importance of bringing the work of his office into a single convenient building, and recommends that an appropriation of \$108,000 be made for the purchase of the building on the corner of Twenty-fourth and M streets northwest, owned by Mr. Ferguson, and also that an appropriation of \$42,000 be made for the erection of storehouses on the grounds attached, to accommodate the accumulated original records of the Service. The buildings now occupied are scattered and liable to destruction by fire ; the annual rental is \$7,500. The interest on the sum asked, viz, \$150,000, at

3 per cent, is \$4,500, a saving on the rent now paid of \$3,000, to which should be added the amount that can be saved in the hire of porters and messengers when the offices are brought into one building—say, \$2,000—making a total saving of \$5,500 annually. There will not be room in the State, War, and Navy Department building, when completed, for the Signal Office; in fact it will not accommodate all the other bureaus of the Department. The purchase of the building suggested by the Chief Signal Officer is, therefore, recommended.

The Monthly Weather Review of the Signal Service, and the Monthly Summary and Review of International Observations, have been regularly published during the year. Work has also been continued on the Meteorological Record. The publications known as Professional Papers and Signal Service Notes have been discontinued, in compliance with the law forbidding the publication of such papers. In the opinion of the Chief Signal Officer the publications in question have a direct bearing upon the current work of the Service, and provision should be made for their publication.

The Chief Signal Officer recommends the adoption by Congress of some provision for the promotion of officers of the Signal Corps, based upon length of service and ability to perform the duties which may be required of Signal officers.

MILITARY PRISON AT FORT LEAVENWORTH, KANSAS.

The board of commissioners, consisting of Maj. Gen. Alfred H. Terry, Adj. Gen. R. O. Drum, and Deputy Judge-Advocate-General Thomas F. Barr, have inspected the Military Prison, as required by law, and report that the condition of the dormitories, hospital, guard-rooms, kitchen, and all premises within the prison-yard is scrupulously clean and neat. The punishment book indicates the general good behavior of the prisoners, and the discipline of the prison is excellent. The food supplies are good, and for the first time since the establishment of the prison no complaints were made as to its amount or quality. The number of prisoners confined is five hundred and thirty-four. But nine persons took advantage of the permission accorded to all to appear before the commissioners and make complaints. While these were, for the most part, trivial, some of the complaints were investigated, and action will be taken by this office as recommended by the commissioners.

The commissioners investigated the complaint made in the last annual report of General Miles that miserable shoes made of worthless material were furnished from the Military Prison. They understand that General Miles referred to the shoes worn during the campaign against Geronimo and his band. The test of shoes in such a service, marching "over cacti and rocks" in a volcanic country, "where it was impossible to move cavalry and pack-trains," is a severe one. To determine the character of the material used at the prison in the manufacture of boots and shoes, and also whether there is room for improvement in the methods of their

manufacture, the commissioners examined the inspector of materials and the assistant quartermaster on duty, and after visiting the shops they are satisfied that every care is taken to secure the very best material, and conclude that the charge cannot be sustained. While there may be room for improvement in the manufacture of the shoes by hand-sewing, it is not conceded that it was through bad workmanship or bad material that the shoes used in the Apache campaign were rendered unserviceable.

RECORDS OF THE WAR OF THE REBELLION.

The volumes XIV and XV of series 1, the two parts of volume XVI, and part 1 of volume XVII, in all five books, have been published at the Government Printing Office, and distributed from the library of this Department. The index of part 2, volume XVII, is in type, and will probably be issued during December with volume XVIII. The text of part 2 of volume XXII, of parts 1 and 2 of volume XXIII, and of parts 1 and 2 of volume XXIV, has been stereotyped. The third part of volume XXIV and parts 1 and 2 of volume XXV are in the hands of the Public Printer. The text of the supplement to volume XII, which includes the record of the Fitz-John Porter court-martial, required to be published by the act of July 31, 1886, has been stereotyped and indexed, and will probably be issued during December. The manuscripts of volumes XXXI, XXXII, and XXXIII are arranged for the printer, but volume XXX is yet incomplete.

An estimate is again submitted for reprinting and binding 6,000 copies each of volumes I to V, as contemplated in the act of August 7, 1882.

THE SOLDIERS' HOME, DISTRICT OF COLUMBIA.

There are 946 inmates of the Soldiers' Home, and the rate of admission during the year exceeded that of any year since it was established. A large amount of money is due the Home from old accounts in the Treasury Department, which should be speedily settled, as the current income appears to be diminishing. The report of the commissioners shows a decrease of income this year of \$37,573.44 from the average income of the two preceding years.

The increased number of inmates renders it necessary that additional space for cooking and for dormitories should be provided. Plans and estimates have been adopted for a large extension to the main building, which will cost about \$150,000.

The maintenance of a large and handsome park, with a system of beautiful drives, entails a regular expense upon the Home, and the commissioners urge the propriety of an appropriation by Congress for the purpose of effecting necessary repairs to road-beds, bridges, &c. There are about ten miles in length of drives within the Home. The accessibility of this park has made it an attractive resort for the people of

Washington, and for the many strangers visiting the national capital. It is believed that an annual appropriation of \$6,000 would be sufficient for the purpose indicated.

A large well has been provided for the purpose of increasing the water supply of the post. The annex to the barracks building, which at the date of my last annual report was in course of construction, has been completed and is now occupied. A brick extension to the stables at the dairy has also been erected.

The reports of the commissioners and the Inspector-General exhibit in detail the fiscal affairs of the Home, and a recapitulation is deemed unnecessary.

STATE CLAIMS, UNDER ACT OF JUNE 27, 1882.

Congress by the act of August 4, 1886, 24 Statutes, 217, authorized the detail of three officers of the Army to assist the Secretary of War in examining and reporting upon the claims of the States and Territories mentioned in the act of June 27, 1882, 22 Statutes, 111, and an appropriation was made by the sundry civil act of August 4, 1886, 24 Statutes, 249, for payment of the expenses thereof. A board was convened by special order of October 6, 1886, composed of the following-named officers: Maj. James Biddle, Sixth Cavalry; Maj. Henry J. Farnsworth, inspector-general; Capt. Edward Hunter, First Cavalry. The War Department having no available quarters in which the Board could be established and the voluminous papers in the claims deposited, suitable rooms have been obtained and the work has begun on the claim of the State of Nevada, the first in order. In September last the second installment of the claim of the State of California was received, and the claims now before the Department for its action are as follows:

Nevada.....	\$372,003 11
Texas	1,842,443 78
Oregon	369,459 19
California (first installment)	64,591 51
California (second installment).....	2,938,623 22
Total.....	5,587,120 81

BUILDING FOR STATE, WAR, AND NAVY DEPARTMENTS

The construction of the west and center wings of this building has gone on rapidly during the past year. The roof is nearly finished, and the interior iron work so far advanced that the plastering can be carried on during the coming winter. It is believed that the wings will be ready for occupation in January, 1888. Appropriations are necessary during the ensuing session for furniture, carpets, file cases, and shelving for the new wings, so that they can be promptly occupied when completed. An estimate of \$130,000 has been submitted for the purpose, and the necessity for that amount is set forth in detail in the Book of Estimates.

MONUMENT AT WASHINGTON'S HEADQUARTERS AT NEWBURG, N. Y.

On June 16, 1886, a perspective view, plans, and specifications of the design selected and approved by the joint select committee on the Newburg centennial for the monument in that city were transmitted to this Department by Hon. Lewis Beach, chairman of that committee.

Under the operations of the joint resolutions of July 1, 1882, and March 3, 1883, a contract dated June 25, 1886, was entered into with Maurice J. Power, the designer of the monument, for its completion by October 17, 1887; and work began on the foundation of the structure August 17, 1886.

PEDESTAL OF THE STATUE OF PRESIDENT GARFIELD.

On February 6, 1886, Mr. J. Q. A. Ward, the contractor for erecting the pedestal of the statue of President Garfield, asked an extension of his time to May 1, 1887. This extension, for the purpose of more careful studies or designs for the figures on the pedestal, was granted. The commission, under authority conferred by the act of July 7, 1884, had selected the site at the intersection of Maryland avenue and First street southwest. As legislation is pending in the Forty-ninth Congress devoting this site to a statue of Columbus or Lafayette, it may become necessary to select another site for the statue of President Garfield.

STATUE OF GENERAL LAFAYETTE.

The commission for the purpose of "erecting a statue to the memory of General Lafayette and his compatriots," of which the Secretary of War is chairman, acting under the law approved March 3, 1885, met soon after the passage of that act, when it was decided that designs for the work should be invited from five sculptors of acknowledged ability in their profession, two of whom should be citizens of France and three of our own country.

Of the French sculptors the commission designated M. Bartholdi, and requested through the Department of State the services of the French Government in selecting the other sculptor to represent France. This action was, however, courteously declined, as the minister felt it in delicate to name a sculptor to be placed in competition with the one selected by the commission.

One of the American sculptors declined to compete on account of numerous engagements and disinclination to enter into public competition for any work. The commission then requested, through the Department of State, the services of two other French sculptors, which, by the kind offices of our minister to France, were obtained.

The commission now have the models submitted by four sculptors and have information of the shipment of the model of the remaining

competitor, so that in all probability the contract for the execution of this work will soon be made.

The designation of the site for the statue has been deferred until the model is selected, as the selection of the site must depend to some extent upon the character of statue to be erected.

REMOVAL OF THE RAWLINS STATUE.

By the act of Congress approved May 17, 1886, the Secretary of War was authorized and directed to have the statue of Maj. Gen. John A. Rawlins removed to a new site in the city of Washington, and the sum of \$500 was appropriated for the purpose. In pursuance of this authority he selected the public reservation known as "No. 33," between Eighth and Ninth streets west, at the intersection of Pennsylvania and Louisiana avenues. This selection was approved by a committee of the Society of the Army of the Tennessee. The removal of the statue to the new site was completed October 11, 1886.

THE GRANT RELICS.

The swords and military and civic testimonials lately belonging to General Grant, which were given to the United States by Mrs. Grant and the late William H. Vanderbilt, were delivered to the Director of the National Museum on the 5th instant, in accordance with the provisions of the joint resolution of Congress approved August 5, 1886. They remained in the custody of this Department until that date, awaiting the preparation of cases for their reception in the National Museum.

RECORDS OF THE DEPARTMENT.

The constant use of the rolls and record-books in the Department, especially those in the offices of the Adjutant General and the Surgeon General, is rapidly rendering them illegible, and it is manifest that measures for their preservation must speedily be provided. Of three methods suggested, viz, printing, copying, or lithographing, I regard the first named as preferable. To copy them would be but a temporary expedient, and lithographing is expensive and undesirable. The cost of printing is doubtless greater, but a volume, when published, would be accessible to a larger number of clerks, thus enabling the current work to be more expeditiously performed, and admitting of a reduction in the clerical force at an earlier date than otherwise would be possible.

Printing is therefore the best and most economical method, and I accordingly recommend that provision be made by Congress for the employment of a force of compositors to set up such work as may be necessary, the Public Printer to transfer the plates to the custody of the War Department after having printed a sufficient number of copies of each volume for the official and exclusive use of this Department.

I also recommend that in the meantime, in order to execute any work for which there may exist an urgent necessity, the Secretary of War may be authorized, in his discretion, to employ after office hours such

portion of the present clerical force as he may deem necessary, at a rate of compensation based upon their present salaries. The familiarity of the present clerical force with the records enables them to render better and more expeditious service than could possibly be obtained from new and inexperienced persons.

The compositors should be employed under the direction of the Secretary of War, inasmuch as the records, which are constantly under reference, could not be spared from the Department without seriously retarding the current work. Neither would it be judicious to permit the records to pass from the custody of the Department, as they contain information which could be successfully used in the fabrication of claims against the Government.

CONTINGENT EXPENSES OF THE ARMY.

The appropriation "for all contingent expenses of the Army not provided for by other estimates, and embracing all branches of the military service" has been reduced from the sum of \$30,000 appropriated in the act of 1885, to \$15,000 in the act of 1886, and is now so small that only the most important matters, or those involving small amounts, are approved for payment from that appropriation in order that there may be money on hand to provide for unforeseen contingencies. The result of this prudent policy has enabled the Secretary of War for several years, in the absence of any special contingency, to return part of this appropriation to the Treasury, as will be seen by the following statement:

Amount of appropriation for Army contingencies carried to the surplus fund:

June 30, 1883	\$531 37
June 30, 1884	10,501 03
June 30, 1885	15,905 94
June 30, 1886	21,353 53

Much embarrassment will result, however, when a contingency arises involving an amount which the Department will be unable to meet with this reduced appropriation, and I believe that it will be good policy and in the end more economical to provide a larger sum for Army contingencies, as the appropriation is by its terms under the immediate control of the Secretary of War, and is only expended in accordance with his orders in each case and upon his responsibility. The above table shows it is not used extravagantly. I accordingly recommend that the sum of \$30,000 be granted for this purpose, which is the sum appropriated for the fiscal years ending June 30, 1885, and June 30, 1886, while prior to these years it was \$40,000 and upwards.

ASSISTANT SECRETARY OF WAR.

Another year's experience in administering the Department has confirmed the views expressed in my annual report for 1885 that provision should be made for an Assistant Secretary of War. The constant in-

use in the business of the Department renders it necessary that such officer should be appointed. It is believed that salaries more commensurate with the arduous and responsible duties performed should be paid to the principal officers in the office of the Secretary of War, the estimates submitted are commended to the favorable consideration of Congress.

WILLIAM C. ENDICOTT,
Secretary of War.

P A P E R S

ACCOMPANYING

THE REPORT OF THE SECRETARY OF WAR

REPORT OF THE LIEUTENANT-GENERAL OF THE ARMY.

HEADQUARTERS OF THE ARMY,
Washington, October 10, 1886.

SIR: I submit herewith the annual reports of the three major-generals commanding the three military divisions into which the territory of the United States is divided for purposes of military administration, accompanied by the reports of the eight department commanders and the commanding officer district of New Mexico; also, the reports of the Adjutant-General, the Inspector-General, the Superintendent of the Military Academy, the commanding officer of the Artillery School at Fort Monroe, and the commanding officer of the Infantry and Cavalry School at Fort Leavenworth, Kans.

From these reports it will be seen that at the date of the last consolidated returns the Army consisted of—

	Officers.	Men.
General	10	.....
General staff.....	573	1, 212
Ten regiments of cavalry	411	6, 942
Five regiments of artillery.....	272	2, 473
Twenty-five regiments of infantry.....	836	10, 721
Indian scouts .....	.....	386
Detachments—recruiting parties, &c.....	.....	2, 003
Total	2, 102	23, 946

DIVISION OF THE ATLANTIC.

Since my annual report of last year we have had the misfortune to lose Maj. Gen. Winfield Scott Hancock, who died February 9, 1886, and the Lieutenant-General performed the melancholy duty of accompanying his remains to the family vault at Norristown, Pa., February 14, 1886. He was succeeded in the command of the Division of the Atlantic by Maj. Gen. John M. Schofield.

No military operations of importance have occurred in this division during the year, but beyond the routine duties at the different garrisons there have been more or less movements of troops, occasioned by reason of fears of yellow fever at one of the Gulf posts, furnishing a light battery to the camp of the Third Corps at Gettysburg, supplying guards for the tombs of the late President Garfield and the late General Grant, and the marches necessitated by lack of facilities at some posts for long-range target practice.

General Schofield repeats the recommendations heretofore made by himself and his predecessor relative to the concentration at some suitable post of several light batteries for their better instruction, and he also calls attention to the fortification and armament of our sea-coasts, his command embracing a large portion of our coasts lying along the Atlantic Ocean.

Further small sums of money have been authorized this year for the enlargement of Fort Niagara; the reconstruction of Fort Porter, under plans and specifications already furnished, which will soon be commenced; and for the construction which is proceeding on the new post near Atlanta, Ga. When these improvements are completed there will be an appreciable advancement in the direction of quartering both officers and men that has long been needed, and it is hoped a continuation of appropriations will in a few years not only greatly add to the comfort of the troops but show good results in the line of both discipline and economy, by reason of concentration and the abandonment of some small unimportant posts which are now mainly occupied for purposes of shelter.

DIVISION OF THE MISSOURI.

In pursuance of orders from the President, Maj. Gen. Alfred H. Terry assumed command of the Division of the Missouri April 9, 1886. Its department organization remains the same as when my last report was submitted, with the exception of the transfer of the District of New Mexico to the Department of Arizona, and the substitution of Brig. Gen. George Crook in command of the Department of the Platte *vice* Howard, Brig. Gen. Thomas H. Ruger to the Department of Dakota *vice* Terry, and Brig. Gen. J. H. Potter to the Department of the Missouri *vice* Miles.

While the division has had no troubles approaching a condition of hostilities during the year, many operations of a minor nature have been rendered necessary to suppress predatory raids in Montana by Indians from one reservation directed mainly against Indians of other reservations, to protect the Indian agents from the insolence and insubordination of their charges, and to secure settlers from the lawless demands of roving bands who have been permitted, on one pretext or another, to leave their reservations.

The adjustment made with the Cheyennes and Arapahoes by the President, through the medium of the Lieutenant General, in July, 1885, has allayed all irritation in the Indian Territory, but the troops in that region have been kept constantly employed in the prevention of unlawful settlements in the Oklahoma country and its invasion by herds of cattle. Unless some legislation is had which will specially fix the status of the Oklahoma land, I fear its many advantages in the way of beautiful landscapes and fertile soil will prove a continual temptation to an adventurous population near its border, which in a short period could make it a prosperous State.

Vague reports of difficulties north and northwest of Fort Lewis, in Southern Colorado, have necessitated the movement of troops in that direction, and the establishment of two summer camps in the Blue Mountain region have quieted all fears and satisfied the settlers, so that all complaints have now ceased.

The Indians at the Uintah and Ouray Agencies, located on the Uintah and Uncompahgre Reservations in Utah, embracing the old White River Utes (who murdered the Meeker family) and the Uncompahgres (removed there some time afterward), became very unruly during last

winter, defied the agent, and did almost as they pleased. After an investigation by an officer of the Army, at the request of the Secretary of the Interior, a command of six companies—four of infantry and two of cavalry—was established in the vicinity of the agencies for purposes of discipline and control. The selection of the site for the cantonment was left to General Crook, the junction of the Grand and Du Chesne Rivers was fixed upon, and the station temporarily named Fort Du Chesne. At this date reports indicate that the agent is now satisfied and the Indians have ceased their insolence and appear willing to behave themselves.

During the year Fort Fred Steele, in the Department of the Platte, and Fort Ellis, in the Department of Dakota, have been abandoned. In their day both of these posts played most important parts in the settlement of the West and Northwest. Their usefulness having passed away, the expense of their maintenance has been stopped by the removal of their garrisons to other points. It is my desire to persevere in this policy of abandoning small posts, and the sums of money allotted this year to Forts Russell, Riley, and Robinson and the post of San Antonio, all in the Division of the Missouri, will aid materially in carrying it out.

DIVISION OF THE PACIFIC.

Maj. Gen. O. O. Howard assumed command of the Division of the Pacific April 17, 1885, *vice* Pope, retired, and Brig. Gen. N. A. Miles assumed command of the Department of Arizona April 12, 1886, *vice* Cook, transferred to the Department of the Platte.

In the northern section of this division we have had some movements of troops arising from riotous proceedings against the Chinese. The prompt arrival of the different detachments at the points where difficulties had arisen inspiring great confidence, peace was readily preserved without the necessity of actual participation by the military in the enforcement of the law.

In the Department of Arizona hostilities against Geronimo were continued during the fall by the department commander, General Crook, but as the results were unsatisfactory, it became apparent to me in November, 1885, that quiet and peace could not be restored until the Chiricahua and Warm Springs Apaches were removed from Arizona. I communicated this impression to the Secretary of War in a personal interview, and in consequence was directed to proceed to Arizona to consult with Crook on this and kindred subjects growing out of existing hostilities. It was my idea to commence by sending immediately the thirty-three prisoners then at Fort Bowie to Fort Marion, Florida. I reached Fort Bowie on November 29, where I found General Crook and Captain Crawford, the latter in command of two hundred Indian scouts, many of whom were Chiricahuas, on the eve of starting into Mexico on an expedition against the hostiles. General Crook did not think the time for the removal opportune, and suggested that I obtain Captain Crawford's views. Crawford concided with Crook, and stated that the removal might affect the conduct of the Indian scouts just going out, in whom both seemed to have great confidence, and in deference to their opinions I deemed it best to await a more advantageous time for the accomplishment of this purpose.

During the winter operations were made principally by Indian scouts under the command of Capt. Emmet Crawford, Third Cavalry, and Capt. Wirt Davis, Fourth Cavalry. The former came upon the Indians in camp in Mexico, January 10; surprised and routed them without loss

to his own troops and no loss to the Indians except their camp equipage, horses, and camp plunder. While occupying the hostile camp negotiations were opened with the hostiles, at their solicitation, with a view to their surrender; but unfortunately Captain Crawford's camp was stolen upon and attacked the next morning by irregular Mexican troops, who claimed to have been seeking the camp of the hostile Indians. In the engagement which ensued Captain Crawford was mortally wounded; three of his men wounded; the Mexicans lost their leader (killed) and four or five men killed and wounded. The loss of Captain Crawford was much to be regretted, as he would, in my opinion, have at that time terminated the cruel and bloody atrocities which continued thereafter for many months. After Captain Crawford's death, Lieut. Marion P. Mans, First Infantry, came in command and continued the negotiations, which resulted, not in the surrender of the Indians, but in a promise on the part of Geronimo that he would go to a point near the boundary line to meet General Crook. This officer met him about twenty-five miles below San Bernardino, Mexico, and exacted a qualified surrender, which was not approved by the President. While en route to Fort Bowie the Indians, suspicious of treachery, marched in skirmish order so as to prevent any considerable number of their party from being entrapped; but the night succeeding the first day's march Geronimo became alarmed from idle stories and escaped with twenty of his best men and thirteen women. The balance of his band continued on to Bowie, after which they were sent to Fort Marion, Florida, with the thirty-three previously captured. The understanding when Geronimo and his followers started in to Bowie was, that if they surrendered their lives would be spared and they would be located in some distant part of the country. Fort Marion was selected as the best place to secure these blood-thirsty savages (whose lives were spared not from any consideration for them but as an inducement for the balance of the hostiles to surrender), so that honest and industrious white citizens and their families might be protected and trade and commerce restored to the Territories of Arizona and New Mexico. They could not be put at any military post west of the Missouri River, because the people in the vicinity would not tolerate them, and as the law excludes them from the Indian Territory, removal to that section was out of the question.

After Captain Crawford's last engagement it became a belief in my mind that the Indian scouts could not be wholly depended upon to fight and kill their own people. I think they were faithful so far as to try to capture or to induce the surrender of the hostiles, but they had no wish to kill their own kindred. That this sentiment was reciprocal was demonstrated by the Indian engagement referred to and others that had occurred previously. General Crook seemed, however, wedded to the policy of operating almost exclusively with Indian scouts, and as his experience was of great weight his policy could not well be changed without his removal to another field. To relieve the embarrassment he at once requested such a course, and as at about the time of the surrender and escape of a part of Geronimo's band a change of the geographical commands was necessitated by the death of General Hancock and the retirement of General Pope, General Crook was sent to the Department of the Platte, and General Miles, on my recommendation, assigned to the Department of Arizona, the latter's instructions being as follows:

WASHINGTON, April 3, 1886.

The Lieutenant-General directs that on assuming command of the Department of Arizona, you fix your headquarters temporarily at or near some point on the Southern Pacific Railroad. He directs that the greatest care be taken to prevent the spread of

hostilities among the friendly Indians in your command, and that the most vigorous operations looking to the destruction or capture of the Hostiles be ceaselessly carried on. He does not wish to embarrass you by undertaking at this distance to give specific instructions in relation to operations against the Hostiles, but it is deemed advisable to suggest the necessity of making active and prominent use of the Regular troops of your command. It is desired that you proceed to Arizona as soon as practicable.

R. C. DRUM,
Adjutant-General.

General NELSON A. MILES,
Fort Leavenworth, Kans.

General Miles went to work with commendable zeal. His troops followed up the hostiles with vigorous energy, broke up their camps by attack four or five times, and gave them no rest until they surrendered on September 4, under circumstances and conditions, however, that should not, in my judgment, permit their being turned over to the civil authorities for punishment, as was intended by the President. On September 8 they were started by General Miles to Fort Marion, Florida, without authority, but at a later date stopped at San Antonio till their final disposition could be decided upon.

Previous to the surrender, and early in July, General Miles had visited Fort Apache, near which were located the peaceable Chiricahua and Warm Springs Apaches, some of whom had been General Crook's scouts, and many of whom, before serving in that capacity, had committed the most brutal murders. On July 3 Miles telegraphed that there were strong military reasons for the removal of these Indians from Arizona and asked authority to send a few of the tribe to Washington with reference to another location. From this I judged the time had about arrived for the forcible removal of all the Chiricahua and Warm Springs Apaches to Florida, in accordance with the suggestions I had made before visiting General Crook in November, 1885. I consequently approved General Miles's request, and, the Secretary of War having authorized it, I directed the former to send ten of the Indians to Washington under charge of an officer, with instructions to report them to the Secretary of the Interior. A delegation of leading men was speedily started and shortly after arrived in charge of Captain Dorst.

On the 7th of July General Miles forwarded a communication giving his views relative to the subjugation of the hostiles and the control of the Apaches, suggesting the advisability of moving the four hundred and forty men, women, and children on the reservation to the Indian Territory, &c., on which I indorsed, July 30, as my recommendation, the following:

Respectfully submitted to the Secretary of War. There are now on the reservation near Fort Apache seventy-one Chiricahua and Warm Springs adult male Indians. These are exclusive of those in this city. It is my belief that if the delegation which is now here goes back to the reservation without having received what they may deem the most satisfactory promises on the part of the Government a large number of those that are now peaceable will endeavor to join Geronimo. I therefore recommend that authority be granted me to direct General Miles to immediately arrest all the male Indians now on the Chiricahua Reservation, near Fort Apache, and send them as prisoners to Fort Marion, Florida; that the delegation now here be sent there also, and that they be held at that point as prisoners of war until the final solution of the Geronimo troubles.

The President called together the Secretary of War, the Secretary of the Interior, and myself, and after discussing the question the President directed me to send a telegram to General Miles asking him what he thought of the proposition to forcibly arrest all on the reservation and send them to Fort Marion, where they could be joined by the party then

in Washington, to which he replied that there would be some advantages, but that some serious objections occurred to him which he would explain fully by letter. The objections contained in his letter were that the delegation went to Washington by authority, with a view of making some permanent arrangement for their future, and that it might be charged the Government had taken advantage of them; that it would be known to all other Indians in the Southwest, and, in future, they might hesitate about sending delegations to Washington, and that it would necessitate a war of extermination against the hostiles then in Old Mexico, in which all would have to be killed. To me the objections of General Miles did not seem sufficiently weighty in the face of the many cogent reasons existing for removal—if removed at all—to some point east of the Missouri River, and I am pleased to say that the President finally authorized them to be sent to Fort Marion, after General Miles, on August 20, had reported that Colonel Wade, commanding Fort Apache, was prepared to accomplish the work.

On the 25th of August I again informed General Miles, in answer to a telegram he had sent to the Interior Department, that no proposition looking to the location of the Chiricahua and Warm Springs Indians west of the Missouri River could be entertained, to which he replied with further recommendations as to establishing them at Fort Union, New Mexico. This was forwarded to the President, who adhered, however, to the decision he had already made, and in consequence the four hundred and forty men, women, and children then at Fort Apache were started for Fort Marion, Florida, where they arrived on September 21.

THE ADJUTANT-GENERAL'S REPORT

shows the distribution of troops, statement of casualties during the year, enlistments and re-enlistments, number of enlisted men drawing increased pay under the act of August 4, 1854, and the number of men who will become entitled to increased pay under the act of May 15, 1872.

It is gratifying to know that there is a marked decrease in the number of desertions from the Army since my last report. The percentage in 1884 to the legal strength of the Army was 15, in 1885 11.7, and during the past year 8.3. The great decrease since 1884 is due, no doubt, to the improvement of administration and to the beneficent legislation which provides for honorable retirement of enlisted men after long and faithful service. From the fact that a considerable number of offenders belong to a class that may be termed professionals, the evil can only be wholly eradicated by legislation which will empower us to indelibly mark with India ink every man convicted of desertion by a court-martial. Fear of detection would prevent such criminals from again offering themselves for enlistment, and would, in my opinion, terminate forever the repeated desertions that are frequently practiced by vicious and bad characters who appear lost to all sense of obligation, and commit the crime for pleasure or the convenience of getting from one place to another.

The recruiting of the Army has been carried on under practically the same system as has obtained for many years, except that the recruits are kept at the general depots for a longer period than formerly. This has proven advantageous to the recruits and the Government in many ways, and the improved quarters and better rations and clothing that are now provided for the enlisted soldier tend greatly to improve and elevate the tone of the service.

THE INSPECTOR-GENERAL'S REPORT

indicates that the Army is in a very healthy and gratifying condition, and it contains many recommendations deserving consideration. The discipline is generally excellent. But few officers have been tried by courts martial during the year, and I think I may safely state there has not been a period during the last twenty-five years when so little necessity has existed for the correction of those holding commissions.

Many officers are becoming disabled, however, by reason of long service on the frontier and from wounds received or disease contracted during the war of the rebellion. While the disabled are being transferred to the retired list as fast as its limits will permit, some relief could be extended if Congress would open that list to the extent of embracing those who are now excluded from it for want of vacancies. This would give a certain degree of promotion, and if we could get the infantry regiments increased to twelve companies, as proposed by the Manderson bill, and the increase of five thousand men reported favorably by the Senate Military Committee last winter, a state of efficiency and usefulness would be reached which would enable us to creditably perform such service as the country might demand.

MILITARY ACADEMY—ARTILLERY AND INFANTRY AND CAVALRY SCHOOLS.

The reports of the Superintendent of the Military Academy, the commanding officer of the Artillery School, and the commanding officer of the Infantry and Cavalry School, show the constant care that is being exercised for the maintenance of a high standard of military education among our officers. The Military Academy and the Artillery School have been in existence for so long a period, and the general principles on which they are based have proven so satisfactory, that there are no marked recommendations made in the report from either which I wish to bring before you now, though many minor points are touched upon which deserve consideration. The commandant of the Infantry and Cavalry School suggests a number of improvements to keep up with the spirit of the age, but, as that establishment is yet in its infancy, it is thought best to move slowly in the adoption of untried methods there until the institution becomes somewhat more crystallized.

RIFLE PRACTICE.

The instruction of the Army in the use of the rifle or carbine with which the men are armed has been thoroughly prosecuted during the year, and the returns from each department, as well as the results of the regular competitions now just closing, exhibit a decided advance in the proficiency of the Army in rifle firing.

In my previous report I called attention to the great relative importance of the company skirmish practice, where the targets are figures simulating the appearance of a line of hostile skirmishers. This practice is the natural sequence to the known distance-firing, and possesses great practical advantages; it not only perfects the fire-discipline of the company and the ability of its officers to control in direction and intensity the fire of their men under conditions as close as peace permits to those which might exist in war, but it also presents to the eye of the soldier an object which bears a fair resemblance to the appearance of an enemy in battle, and accustoms him as far as possible to aiming and

firing at men. The lack of appropriate ground for these exercises has in some cases prevented their proper prosecution, but as their importance is becoming better recognized these obstacles are gradually being overcome, until, in the near future, I anticipate that many of the soldiers will become expert skirmishers, and the effective fire of the mass of the Army will have greatly increased in value.

LANDS IN SEVERALTY TO INDIANS.

As the Army is necessarily deeply interested in the settlement of the Indians in permanent abodes, I again beg leave to submit my recommendations of last year on this subject.

In my annual report for 1885 I recommended that each Indian family be given and located upon the 320 acres now provided for them by law in case of actual settlement; that the Government then condemn the remainder of each reservation and buy it for \$1.25 per acre, and with the proceeds purchase Government bonds, to be held in trust by the Interior Department, giving to the Indians each year the interest on the bonds for their support. I cited, in illustration of what would be the practical workings of this suggestion, the case of the Crows, the Cheyennes, the Arapahoes, and the Utes, but the limits of my report did not permit a full elucidation of the advantages that would accrue to the Indian, nor even an allusion to the large amount of land now lying idle that would thereby be opened to settlement, and increase by so much the material prosperity of the nation.

When it is attempted to deal with this subject more in detail, a difficulty is at once encountered, in that neither the actual area of the various reservations has been accurately determined nor the numbers of the Indians occupying them known within more than approximate limits. It will, therefore, not be possible to show the exact workings of the method proposed, but only a general summary covering the cases of the larger reservations in each Territory, and the most populous of the different tribes.

Since the appropriations for the support of the Indians are not in every case made specifically for those upon any particular reservation, but rather collectively for those inhabiting some State or Territory, in making comparisons with the sum now required for the subsistence of the Indians and the annuities allowed them by treaty, the aggregate for a Territory, or several Territories, has necessarily been considered rather than for each tribe or reservation.

In Dakota the principal reservations are the Fort Berthold and those inhabited by the various bands of Sioux. The Fort Berthold Reservation, with an area of over 2,900,000 acres, has a population of 1,300 people; the others—the Crow Creek, Old Winnebago, and Sioux—an area of nearly 22,250,000 acres, and a population of about 25,800. Carrying out the proposals of my report would, in the former case, afford an annual income of over \$140,000, and in the latter case a surplus unoccupied by the Indians of over 20,500,000 acres (over 32,000 square miles), or an extent of territory equal to the combined area of the States of New Hampshire, Vermont, Massachusetts, and Connecticut, the proceeds of which at 4 per cent. per annum would yield an interest of over \$1,000,000. With two of the smaller reservations—the Devil's Lake and South Mountain, area 276,480 acres, population over 1,800—nearly half of the land would be required by the Indians; in this case, then, the income from the surplus would be small, being a little less than \$8,000 per annum.

In Montana the Blackfeet Reservation contains over 21,500,000 acres, and a population of less than 7,000 Indians; the surplus land, equal to the area of the State of Maine, would then return an income of \$1,000,000. The Crow Reservation mentioned in my report could, in a similar manner, be made to produce an annual sum of \$223,000.

Considering all the Indians and reservations in the Territories of Dakota and Montana, we have an aggregate area of over 54,500,000 acres, and a population of less than 45,000. The surplus area of nearly 81,000 square miles (almost equal to the entire State of Kansas), would produce an annual interest of over \$2,500,000. The appropriations for the fiscal year ending June 30, 1886, for fulfilling treaties with these tribes and for their subsistence and civilization and the pay of the employees incident to such undertaking, amount to about \$100,000 less than this sum.

In Wyoming the Shoshones are located upon the Wind River Reservation. One hundred and seventeen thousand dollars per year could be derived from their surplus land.

In Idaho the Fort Hall Reservation, occupied by the Bannocks and Shoshones, would in the same way produce each year \$55,000; the Coeur d'Alene Reservation, \$28,000. In the two Territories of Wyoming and Idaho the total area of all the reservations is nearly 5,000,000 acres, the total population nearly 6,000. An area of nearly 7,200 square miles, almost equal to the State of New Jersey, would not be required for the Indians, and an income would be yielded of about \$235,000—a sum more than \$100,000 in excess of the appropriation for the last fiscal year.

In Oregon the most populous reservation is the Klamath, with over 1,000,000 acres, but less than 1,000 inhabitants. It would yield nearly \$50,000 a year.

In Washington Territory the Yakamas, about 3,200 in number, occupy the reservation of 800,000 acres of the same name. Here the surplus land would bear but \$30,000 a year. In Oregon and in this Territory the reservations, with a total population of about 16,000, embrace 8,400,000 acres, or about seven and one third million acres more than would be required by them under the plan proposed, which would produce per annum \$370,000, or about \$300,000 more than was appropriated last year for these Indians.

The different bands of Utes in Utah and Colorado number about 3,650, and their reservations include over 5,000,000 acres, of which the surplus portion would produce a yearly income of \$240,000, or about \$175,000 more than was disbursed last year for their benefit.

In New Mexico the Navajoes, on the reservation of the same name, have now over 8,000,000 acres for a population of 23,000 people. Here the surplus land would yield over \$330,000 a year.

For the surplus lands of the Mesquero Apache Reservation the income would be nearly \$20,000.

In Arizona the principal reservation is the White Mountain, with the agency at San Carlos. It embraces more than two and one-half million acres. Considerable uncertainty exists as to its population, but it is probably about 3,000 in the vicinity of the agency, and 2,000 more—making 5,000 in all who are now engaged in farming and in efforts to make themselves self-supporting. The latter would, however, be entitled to all the benefits obtained by the agency Indians in any scheme looking to the promotion of their general prosperity. Carrying out the proposals of my report would leave a balance of considerably over 2,000,000 acres, with, according to the plan advocated, about \$110,000 per year.

Considering collectively the Indians of New Mexico and Arizona, we have reservations embracing sixteen and one-half million acres, inhabited by nearly 53,000 people. The surplus land would include about thirteen and three-fourths millions of acres, about equal to half the State of Kentucky, which would yield, according to the plan proposed, nearly \$640,000—a sum greater by \$350,000 than that appropriated for the last fiscal year for the support of these Indians.

In the Indian Territory the Cheyenne and Arapahoe, the Kiowa and Comanche, and the Wichita Reservations embrace over 8,000,000 acres. The population is about 7,750. The income from the surplus land (\$375,000) would come within \$75,000 of equaling the amount appropriated. Considering all the Indians in this Territory, we have a total of nearly 80,000, an extent of reservation of thirty-one and one-half millions of acres, excluding the Oklahoma country, which would produce an annual income of about one and one-third million dollars.

The Indian reservations of the United States contain about 200,000 square miles, and their population is about 260,000. Twenty-six thousand square miles would locate each family upon a half section of land, leaving a surplus of about 170,000 square miles, which, according to the plan I have proposed, would produce annually \$4,480,000. This amount exceeds by about \$660,000 the entire sum appropriated for the payment of their annuities and for their subsistence and civilization.

The policy advocated in my report would be most advantageously applied gradually, the general government of the Indians being continued according to the methods now in vogue, or such improvement of them as time and experience may suggest. The ultimate development of the suggested policy would, as the Indians advance in civilization and intelligence, result in the return to them of the principal derived from the sale of their lands, which, until such measures were authorized by act of Congress, would be held as a trust for their benefit, and the income applied to their support.

Very respectfully, your obedient servant,

P. H. SHERIDAN,
Lieutenant-General, Commanding.

Hon. WILLIAM C. ENDICOTT,
Secretary of War.

REPORT OF THE ADJUTANT-GENERAL.

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, October 9, 1886.

Lieutenant-General PHILIP H. SHERIDAN,
U. S. Army:

GENERAL: Pursuant to your instructions, I have the honor to submit the annual returns of the Army:

- A.—Organization of the Regular Army.
 - B.—Return showing actual strength of the Regular Army.
 - C.—Distribution of troops in the Division of the Atlantic.
 - D.—Distribution of troops in the Departments of the Missouri, Texas, the Platte, and Dakota—Division of the Missouri.
 - E.—Distribution of troops in the Departments of California, the Columbia, and Arizona—Division of the Pacific.
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F.—Geographical divisions, departments and posts, with distribution of troops, post-offices, telegraph stations, and nearest railroad station or boat landings.

G.—Statement of casualties during the fiscal year ending June 30, 1886.

H.—Statement of enlistments and re-enlistments in the Army during the fiscal year ending June 30, 1886.

The number of enlisted men now in service who are drawing increased pay under the act of Congress of August 4, 1854, is as follows :

Five years' continuous service	3,407
Ten years' continuous service.....	1,619
Fifteen years' continuous service	1,183
Twenty years' continuous service.....	240
Twenty-five years' continuous service.....	71
Thirty years' continuous service	19
Thirty-five years' continuous service.....	13
Total	6,642

The number of those who will become entitled to increased pay under act of Congress of May 15, 1872, during the fiscal year ending June 30, 1888, is :

Re-enlisted pay	591
One dollar per month for third year of service.....	3,935
Two dollars per month for fourth year of service	3,879
Three dollars per month for fifth year of service	2,938
Total	11,343

and the number of enlisted men in service whose terms will expire during the same period is 3,413.

The officers of the Adjutant-General's Department are properly assigned, and in the discharge of their appropriate duties.

DESERTION.

It is very gratifying to me to report a marked decrease in the number of desertions from the Army during the past year. The percentage of desertions to the legal strength of the Army, which, in 1884, was 15, was reduced in 1885 to 11.7, and during the past year has been further reduced to 8.3. While part of this result is due to the increasing appreciation on the part of recruiting officers of the importance of the interests confided to their care, I have no doubt that this great decrease since 1884, in which year beneficent legislation provided an honorable retirement to men after thirty years' faithful service, is not a mere coincidence, but evidences that the Army at large recognizes and appreciates the active interest in their behalf by the constituted military authorities and by Congress. That this is not a mere conjecture, but a real fact, is proved by the records of the Army, which show 1,300 re-enlistments in 1884, 1,731 in 1885, and 2,121 in 1886. The total number of men in the Army drawing increased pay for service ranging from five to thirty years and upwards has also steadily increased. The number of these men was 6,253 in 1884, 6,515 in 1885, and during the past year reached 6,642, or nearly one-third of the actual strength of the Army.

While the crime of desertion can never, perhaps, be absolutely eliminated, I am convinced that the adoption of a carefully considered code of punishments for all military offenses, the establishment at posts of a light prison for the confinement of minor offenders, &c., would greatly tend to still further lessen the number of desertions.

EDUCATION IN THE ARMY.

An examination of the official reports made this year on the subject of Army schools further strengthens my opinion that the present voluntary school system in the Army is a failure, and from inherent radical defects will remain so. Those of the men who are the most ignorant, and, therefore, in the greatest need of instruction, are the most averse to attend school. The attendance of this class of men should be made compulsory.

There is no question that military schools properly organized and efficiently taught would prove of very great benefit to the rank and file of the Army, but among the necessary requisites for successful results instruction must be made a military duty, and the hours of attendance should be during the day. The course of studies should be carefully prepared and embrace such subjects of general and special nature as would be of positive and practical advantage to soldiers. Teachers should have recognized rank and position, and their selection carefully made after an examination, which would develop not only the knowledge they possess, but also their special capacity and aptitude for imparting it—a much rarer qualification than is generally supposed.

RECRUITING SERVICE.

During the past year the superintendency of the general recruiting service has been maintained at New York City; the mounted superintendency, which up to June 30, 1886, had been established in the city of Saint Louis, Mo., was at that date transferred to the cavalry depot at Jefferson Barracks, Mo. Under the provisions of General Orders No. 39, dated June 22, 1886, there is to be but one superintendent of the recruiting service after October 1, 1886, with headquarters at New York City, whose supervision will include the rendezvous of the mounted as well as those of the general service.

On October 1, 1885, recruiting rendezvous were in operation at the following points: Four in New York City; two in each of the cities of Philadelphia, Baltimore, Chicago, Cincinnati, and Saint Louis; and one each at Boston, Albany, Buffalo, Harrisburg, Pittsburg, Cleveland, Detroit, Denver, Geneva, N. Y., and Washington. The rendezvous at Geneva, N. Y., was closed December 31, 1885, and one was opened at Nashville February 4, 1886.

In cities where only one rendezvous has been in operation the officers in charge, whenever the necessities of the service required it, have made enlistments for both the general and the mounted service.

In addition to the operations of the general and mounted recruiting services, recruiting has been carried on as heretofore—without expense to the recruiting fund—in the departments constituting the divisions of the Missouri and the Pacific, by officers stationed at military posts and under the supervision of the assistant adjutant-general at the headquarters of each department; and, in the division of the Atlantic, at the several posts by recruiting officers designated by their respective regimental commanders.

Recruiting for the Engineer battalion has been in like manner carried on by officers of the battalion at their respective posts, under the supervision of the battalion commander; and, as occasion required, suitable men have been enlisted at one of the rendezvous in New York City for assignment to that command.

The total number of enlistments and re-enlistments in the Army (ex-

clusive of the Signal Corps) for the year ending June 30, 1886, was 6,941, classified as follows :

For the general and mounted services.....	3,728
For the departmental recruiting service.....	1,540
For the Engineer battalion	75
	<hr/>
	5,343
For special regiments, detachments, &c.....	1,614

Of the 5,327 accepted recruits, 3,306 were native born and 2,021 of foreign birth ; 4,847 were white and 480 colored. Eighteen thousand and ninety-four applicants for enlistment were rejected by recruiting officers on account of physical or mental disqualifications, indicating that the public interests were carefully guarded by the officers charged with the responsible duty of recruiting. This care and vigilance on their part is emphasized by the fact that while 29 per cent. of the total number of applicants for enlistment was accepted in 1884, the percentage of acceptance was reduced the following year to 27.7, and during the past year did not quite reach 23 per cent.

All newly-enlisted recruits of the general and mounted services have been retained at least three months at the general depots for instruction before assignment to regiments, and it is believed this has been an important factor in reducing the number of desertions during the past two years.

Respectfully submitted.

R. O. DRUM,
Adjutant General.

REPORT OF THE INSPECTOR-GENERAL.

HEADQUARTERS OF THE ARMY,
INSPECTOR-GENERAL'S OFFICE,
Washington, D. C., October 6, 1886.

SIR: I have the honor to submit for the information of the honorable Secretary of War and the Lieutenant-General commanding the Army, the following, my report as Inspector-General of the Army for the current year.

The last annual report, made by my predecessor in this office, Brig. Gen. Nelson H. Davis, is dated September 17, 1885, and immediately thereafter, upon September 20, 1885, General Davis was, after a long career of most honorable service, placed upon the retired list under the requirements of the law. Upon the 22d of September, 1885, I was appointed to succeed him, and since that time have been on duty here. On the same day Lieut. Col. Joseph O. Breckinridge was promoted to be colonel and inspector-general, Maj. Edward M. Heyl to be lieutenant-colonel, *vice* Breckinridge, and Capt. Henry J. Farnsworth, Eighth Cavalry, was appointed to fill the vacancy of major and inspector-general, caused by the promotion of Lieutenant-Colonel Heyl.

Inspector-General Col. Roger Jones has, throughout the year, as during previous years, continued on duty as inspector-general of the Division of the Atlantic and of the Department of the East, performing most efficient and valuable service, which has kept him constantly occupied. He has made numerous valuable suggestions, which have been communicated to the Lieutenant-General.

Inspector-General Col. Joseph O. Breckinridge was, on October 10, 1885, assigned to duty as inspector-general of the Division of the Mis-

souri, and on October 20 he reported at division headquarters and took charge of his office. He has since that time been actively occupied with the numerous duties devolving on him.

Inspector-General Lieut. Col. Robert P. Hughes has continued on duty as inspector-general of the Division of the Pacific and the Department of California.

Inspector-General Lieut. Col. Edward M. Heyl has remained on duty as inspector-general of the Department of Texas.

Inspector-General, Maj. George H. Burton has continued as inspector general of the Department of the Missouri.

Inspector-General Maj. Henry J. Farnsworth, who, at the time of his appointment, was serving in command of his troop in the Indian campaign in New Mexico, reported for duty in this office November 15, 1885, pursuant to orders from the War Department, and since that time has been on duty here. In addition to his regular duties in this office he has made a special investigation in the Department of the Columbia, ordered by the Secretary of War.

As will be seen from the foregoing, notwithstanding the increase in number of inspectors-general provided in the act approved February 5, 1885, there are not a sufficient number available for assignment to all the departments; and it has been necessary to continue on duty as acting inspectors-general the line officers specified below.

The law approved June 23, 1874, after enumerating the number and rank of officers of the Inspector-General's department, says: "The Secretary of War may, in addition, detail officers of the line, not to exceed four, to act as assistant inspector-general: Provided, That officers of the line detailed as acting inspectors-general shall have all the allowances of cavalry officers of their respective grades." (Supplement to Revised Statutes, vol. 1, p. 100.)

The four officers detailed under this act, by General Orders No. 47, Adjutant-General's Office, 1885, have served since the last annual report, and are as follows:

Lieut. Col. Edwin C. Mason, Fourth Infantry, Department of Dakota.

Lieut. Col. Henry M. Lazelle, Twenty-third Infantry, Department of the Columbia.

Maj. William F. Drum, Fourteenth Infantry, Department of Arizona.

Maj. Robert H. Hall, Twenty-second Infantry, Department of the Platte.

The work that has been performed by the inspecting officers during the year has been very great, and it has been important work. All of the military posts have been thoroughly inspected by division or department inspectors, in addition to the inspections required by paragraph 1327, Army Regulations, and numerous special investigations have been conducted.

The money accounts of disbursing officers, amounting to many millions of dollars, have been regularly verified. The reports of these inspections are submitted herewith for transmittal to Congress, as required by act approved April 20, 1874. These verifications of money accounts, although few errors or irregularities have been detected, are none the less important, and their usefulness is appreciated by most officers who disburse public funds.

The discharge of these duties has kept the officers on the road away from their homes a great part of their time, and subjects them to an expenditure of their private means from 15 to 20 per cent. greater than the amount that is afterwards refunded to them under existing laws.

The four officers serving in the department by temporary detail are all gentlemen of high character and capacity and have performed their duties to the entire satisfaction of this office, and so far as I can learn, to the satisfaction of the commanders to whose staffs they are attached. I would be glad if they could be immediately transferred into the department, but as it is now, they are four field officers absent from their regiments, and they must feel the inconvenience of serving on a detail which may be terminated at any moment by a simple order. I therefore urgently request that the Secretary of War and the Lieutenant-General will use their influence with Congress to have six officers of the lowest grade in the department added to it. Four to replace the four field officers of the line now serving by detail and two as additional assistants in my office, where they are greatly needed.

The urgent necessity for permanent clerical assistance has so frequently been referred to by my predecessors and by all the officers of the department, that I deem it my duty to again invite attention to the subject.

The order of June 16, 1885, issued from the headquarters of the Army allowing each inspector-general and acting inspector-general at division and department headquarters one general service clerk, with rank of corporal, and one private as messenger, afforded temporary relief, but the acts of Congress approved June 30, and July 29, 1886, provides for a reduction of general service men, and, by existing orders, the assignment of the limited number authorized by those acts is left to the discretion of division and department commanders.

Nearly all of the varied duties devolving upon an inspecting officer demand an amount of clerical work, and unless he has sufficient clerical assistance, it is manifest that what he accomplishes must be incomplete and imperfect and his usefulness limited. No other branch of the staff is hampered in this way. A young captain in the Subsistence or Quartermaster's Department has all the assistance he demands, limited only by the amount of work he has to perform. The Inspector-General's Department alone is left with undefined and doubtful rights in this regard.

The Inspector-General being away from his office much of his time on duty, it is very necessary that he should leave an intelligent clerk in charge, who can answer all questions the general in command may ask. I therefore urgently recommend that Congress be requested to authorize that every officer of the Inspector-General's Department, when on duty, shall be allowed a clerk of class three and a messenger, the persons so authorized to be employed only upon public duty pertaining to the inspection branch of the service.

All reports and my own observation prove that the Army, as a whole, is in a very healthy and gratifying condition. There is not a bad or a poor regiment in it. Some regiments excel others in certain lines of instruction, but there is not one which could not be brought to the highest degree of excellence in any line of military duty belonging to its class in a very short time. The officers are sober and orderly, capable and intelligent, and ambitious to excel when an opportunity is afforded them. Small commands, depleted by details for all manner of work, take from them the possibility of showing what they could or would do, and must dampen their ardor.

The enlisted men are sufficiently intelligent and educated for all necessary purposes. They are as well set up and instructed in their drills as their opportunities will permit. They are orderly and subordinate and faithful in the discharge of their duties, and they endure the privations and hardships of their calling with commendable fortitude. No

troops have ever undergone greater hardships than those operating against the hostile Apache Indians during the last year in New Mexico and Arizona with less complaint. The enlisted force of the Army is a most respectable body of men.

CLOTHING.

The clothing furnished to the Army is of the best quality, and is generally satisfactory. Whenever an article is found to be defective or unsatisfactory and a better one is proposed which meets with the approval of the Lieutenant-General, the Quartermaster's Department has shown great willingness to conform to the adopted improvements; so there is little just ground for complaint regarding the dress of soldiers. There is no lack of effort to make it what it should be.

To adjust the uniform drawn by an individual to his person, it has always been found necessary to keep a tailor employed in each company, who alters the uniforms at the expense of the men, and the charge for altering a suit or sometimes a garment averages, as a rule, \$4 or \$5. It is hardly fair that the soldier should be subjected to such a charge upon clothing which is supposed theoretically to be made up when issued to him. I therefore recommend that the company tailor be placed on extra duty in the Quartermaster's Department and paid 50 cents a day, and that the clothes of the men be fitted free of charge to them, the tailor, while so employed, to be excused from all duty except proper roll-calls and inspections.

SUBSISTENCE.

The ration never was better either in quality or variety than it is now. There are of course complaints, as there always must be, of a failure in some article supplied to come up to the proper standard, but these failures are local and temporary and on proper representation are, I think, always rectified.

Some officers are of the opinion that, without increasing the cost or quantity of the ration, there might be issued an amount of fresh vegetables at certain places in lieu of other parts of the ration, thus saving the company the expense of purchasing them. This I think worthy of the consideration of the Commissary-General.

The issue of salt pork as a part of the ration is a matter of such universal and persistent complaint that I deem it my duty to call attention to it. Even if bacon is a little more costly to the Government, the demand for it is so general that I think it might be listened to.

In every company the necessary table furniture is purchased out of a fund formed by saving and scrimping the men's allowance of food, and I suggest that a simple and suitable allowance of mess furniture might be gotten up and issued by the Subsistence Department, to be accounted for as other public property.

Likewise, I have to recommend the enlistment of a competent cook for each troop, battery, company, and regimental band in the service, the men enlisted for this purpose to receive such extra-duty pay from the Subsistence Department as, with their pay and allowances as privates, will make their compensation amount to \$30 a month, the amount ordinarily paid cooks who prepare food for as large a body of men as a company; and further, that while thus employed they be excused from duty except proper roll-calls. The proper preparation of a soldier's food has so much to do with his health and happiness that I consider the matter worthy of attention.

DESERTION.

The matter of desertion and the means of suppressing this vicious crime continues to attract attention, as it has in years past. A great deal has been written, latterly, on this subject by thoughtful and intelligent persons, but most of the articles I have seen appear to me to be not practical and altogether sentimental.

The first glaring fact to be recognized is, that desertion is a most disgraceful crime, and until all good men and women in the land, and the judges of our civil courts are brought to regard it as such, not much can be done to diminish the extent of it. So long as military administration treats it as a less degrading crime than petty larceny, and so long as influential public journals publish, as they now do, that desertion is nothing but a breach of contract, only regarded as a crime by West Point men, who are supposed to be the embodiment of cruelty, it will flourish.

Among savage tribes of men, by virtue of an instinct that is universal, the strong and vigorous, when the band is threatened, will place themselves between the weak and helpless and the impending danger to shield these until a refuge and safety is found; and civilized races have, in every age, regarded it as the duty of all capable of bearing arms, if need be, to lay down their lives in defense of the home and fireside of their kindred, and this position has been regarded as the post of honor. To fail in this duty or abandon this post of honor has always been regarded as a crime deserving of death or disgrace.

Whether men come into the military service by voluntary enlistment by conscription, or by levy *en masse* of the whole population, the obligation is equally imperative, and the soldier who quits the post of duty assigned him or fails in its performance, commits a crime akin to treason, and is deserving of death or the most humiliating punishment.

Regarding desertion as a crime, the only way that has ever been discovered in the experience of men to discourage crime is to punish it; wherever it shows itself to stamp it out of existence. Crime will always exist, but by stern repression it can be kept down.

In our service I know of but two proper ways of punishing desertion in cases where the death penalty is not involved. One is to keep as many convicted deserters as can be cared for, at the larger military posts, to do the menial and most disgusting work of the command, in the sight of honorable soldiers, thus keeping their shame constantly before them and relieving good men of work they ought not to be called upon to perform. The other, to confine them with the most degraded convicts in the most severe prisons in the land.

In all cases the criminal should be marked, not cruelly, but distinctly, as a majority of school boys mark themselves, so that he cannot repeat his offense continually; and no deserter should ever again be permitted to enlist.

As a means of decreasing the evil of desertion, the military prison at Fort Leavenworth has shown itself to be an entire failure. General Sacket, Inspector-General, in his annual report made two years ago, comments on this failure exhaustively, and it is unnecessary to repeat what he then said. A longer experience confirms the opinions he then expressed, and I feel safe in saying that a large majority of officers, serving with troops, regard the military prison as encouraging military offenses, particularly desertion, rather than discouraging them. The prisoners are pampered, not punished in the way they should be. They are too comfortable, too well fed and cared for. They are not made to

feel constantly that they are in disgrace, and, on their discharge, they go back to their friends not to have the finger of scorn ever afterwards pointed at them by their fellows, but as if returning from some honorable school of instruction. Such is the belief of officers generally. The Army is not intended as a reformatory for bad men. That duty rests upon other organizations in the community.

It is the reviewing authority, generally, which determines the place of confinement of a soldier sentenced by a court-martial; and it is the custom, I understand, when a man convicted of desertion is likewise convicted of petty larceny, owing to the fact that some public property in his possession is not found after his departure, to send him to a civil penitentiary as unworthy to associate with the deserter simply, who is sent to Fort Leavenworth. This is giving desertion a creditable consideration, which it does not deserve. I therefore recommend to the honorable Secretary that steps be taken to prevent any deserter from being sent to the military prison, and to prevent his confinement at any place being reduced to a less period than the time for which he enlisted.

With regard to the military prison itself, the quarterly inspections provided for by section 1348, Revised Statutes, have been regularly made, the last by Maj. G. H. Burton, inspector-general, on September 12, 1886. I visited the prison myself only a few days after the date of Major Burton's last visit, but confined myself to some general inquiries, his inspection having been thorough and complete. His report shows the affairs of the institution to be admirably conducted. As a manufacturing establishment of necessary articles for Army use, it appears to be as well organized and managed as it possibly could be, and no more capable or efficient officer to conduct its affairs could readily be found than its present commandant, Col. A. P. Blunt, of the Quartermaster's Department.

The military prison was established by act of Congress in the year 1873 for the safe-keeping and punishment of military convicts, and, after a fair trial, it has, in the opinion of a large majority of officers, failed to accomplish satisfactorily the purpose for which it was intended. I therefore recommend to the honorable Secretary that steps may be taken to discontinue it as a prison, and that the manufacturing plant, which has grown up with it, be transferred to the Ordnance Department, which, in the distribution of work in the Army, is exclusively the one designed to be a manufacturing department.

There are many capable officers in the Ordnance Department who have an abundance of leisure time on their hands, and by making the transfer, two quartermasters and four officers of the line would be released and restored to their legitimate posts of duty.

SCHOOLS.

It was remarked by my predecessor, General Davis, in his report of last year, that the post schools had not proved a success generally, so far as the enlisted men were concerned, while they had been beneficial in the instruction of children. The same condition of things continues to exist, and some officers have recommended that attendance at school of enlisted men be made compulsory. I am entirely opposed to anything of the kind. In the first place, knowledge cannot be crammed into a man against his will, and in the next, I doubt the legal right of the Government to compel mature men to attend school like children. If the enlisted men of the Army do not come up to a desired standard

of mental attainment, the remedy should be found in the recruiting office, in the same way that the standard of physical fitness is kept up. While recruits are as easily obtained as they now are, I think it would be well to take none who cannot read and write, and I would further recommend that none but American citizens, either by birth or adoption, be enlisted. It is important to keep up the schools for the benefit of children and such enlisted men as choose to go to them.

POST CEMETERIES.

The condition of many of the post cemeteries is far from satisfactory, and the post authorities are without means to put them in a proper state of repair and neatness.

It is complained by officers and men that the graves of soldiers, dying now, do not receive the care that is bestowed on those of the men who died during the war which are in the national cemeteries, and it has been suggested that the more important post graveyards might be made national cemeteries of a lower grade, so as to receive the benefit given to those established by law.

There are difficulties, however, in bringing this about which cannot be overcome. To convert a post graveyard into a national cemetery would transfer it from the control of the post commander to the Quartermaster-General, and subject it to the operation of imperative laws that would be inconvenient. It would prevent the interment in it of the wives and children of soldiers and of citizens employed about the post whom it might be desirable to bury there. I see no remedy for the evils complained of but to ask the Quartermaster-General, in estimating for funds for the national cemeteries, to ask for an additional sum, expressly for keeping the post burial places in order, the funds to be disbursed by him through the post quartermasters. This I recommend.

ARMY REGULATIONS.

There is no more urgent and crying need in the Army than a new revision of the Army Regulations, to make them conform to the changes which have been made and to the orders issued since the last revision.

The reasons urging this are so apparent to all that it is not necessary to enumerate them. In making such a revision I think it would be wise to omit much matter which encumbers the present edition which is to be found in other works of authority, and which is out of place in a hand-book given to officers and men for their daily guidance. This is the kind of book of regulations that is needed, and I recommend to the honorable Secretary that a board be convened to prepare one. It will take considerable time to accomplish the work, but every day's labor spent upon it will be useful.

A revision of the tactics, in which the instruction for each arm of service shall be treated according to the requirements of that arm by itself, without regard to a forced conformity to the school of another arm, is much needed.

TARGET PRACTICE.

There seems to be a growing belief amongst officers of this department, post commanders, and others, that entirely too much time is devoted to target practice, to the neglect of other equally important duties, such as the "setting up" of the soldier and drills.

The tendency seems to be to make a few expert shots with the rifle,

to the neglect of other arms, instead of a well-instructed command with the weapons which men would be called upon to use in active service.

Reports show that but little attention is devoted to mounted-target practice with carbine and pistol, and that instruction in estimating distance and skirmish firing do not receive the attention they merit.

I am of the opinion that officers should not compete with enlisted men at target; they have an undue advantage over the enlisted men both in time for practice and amount of ammunition therefor. I would recommend separate classes, and that competition be limited to the department in which the troops may be serving.

On this subject Colonel Mason, acting inspector-general, Department of Dakota, in his annual report, says :

Target practice has been observed, and the pre-eminence given it over all other military exercises orders require. This practice is a severe tax on the troops in some cases, and particularly is it so on the company officers when but one or two are for duty. In many cases officers spend daily during the target season from five o'clock in the morning until late in the afternoon on the target-range, the men of the companies going and coming from their work as they are required. That the Army is obtaining a fair paper record as marksmen is doubtless true. It may be fairly questioned whether we are making well set-up, drilled, and disciplined soldiers at the same time. The remark frequently made, "If the man is a good shot I want him in my company," indicates that the other soldierly qualities are not held in as high esteem as heretofore. I think the opinion is gaining ground that target practice, as now conducted in the northern latitudes, where the period for out-door exercises is short, occupies more than its fair share in the military instruction of the soldier. It is equally as important that a cavalryman should know how to ride and take care of his horse, and that the infantryman should be well drilled and hardened by frequent marches for active service, as that he should be able to make a good score for his company.

Major Hall, acting inspector-general, Department of the Platte, remarks :

Target practice is pursued with great enthusiasm. All other duties, including drill and even discipline, are subordinated to it, and certainly no lack of energy was discoverable in the efforts of both officers and men to create a large figure of merit. I venture the opinion that skirmish firing at unknown distances should receive more attention, at the expense of some of the time now consumed in the known-distance practice.

Nearly all other inspectors concur in the views herein expressed.

In the last annual report of the Inspector-General the condition of the light or field artillery was spoken of as altogether unsatisfactory, and the same condition of things continues to exist, but I know that the Lieutenant-General has this matter under consideration and will rectify the evils complained of as soon as he can in the way which seems best to him. I will only say that in my opinion the practice of changing light-battery commanders at short intervals by detail in rotation can never work well.

Out of twelve captains of artillery, there will hardly ever be found more than four who, by reason of age, habits, and tastes, are fitted to be brilliant light-battery commanders, and the selection should be confined to these, and they should not be changed as long as they are efficient.

This branch of the service needs much fostering care. It has been the pride of the Army and it can be made so again.

COLLEGES.

Quite recently an order has been issued, requiring officers of the Inspector General's department to visit the colleges where Army officers are on duty, and to report upon the work that is being done. No such inspections have yet been made, but much good is anticipated therefrom.

POLICE.

At every military post there is an amount of dirty work to be done which is quite necessary, but at the same time revolting to those who have to do it. It is the kind of work which in towns and villages is performed by night scavengers who are hired for the purpose. Where there are no convicted prisoners at a post, I recommend that such work be done by contract with persons not of the command.

Respectfully submitted.

A. BAIRD,
*Brigadier and Inspector General,
Brevet Major-General, U. S. Army.*

The ADJUTANT-GENERAL, UNITED STATES ARMY.

REPORT OF MAJOR-GENERAL SCHOFIELD.

HEADQUARTERS DIVISION OF THE ATLANTIC,
Governor's Island, New York Harbor, September 18, 1886.

SIR: In compliance with the instructions of the Lieutenant-General commanding the Army, I have the honor to submit the following report of operations in the Division of the Atlantic during the past year:

The last annual report of this division, dated October 7, 1885, was made by my distinguished predecessor, the late Maj. Gen. Winfield S. Hancock, whose death the Army have since been called upon to mourn. The Lieutenant-General commanding the Army exercised immediate command of this division from the date of General Hancock's death, February 10, until April 13, upon which latter day I assumed the command in obedience to orders from the War Department. In the short time during which the command has devolved upon me no military operations of importance have occurred, and the preceding part of the year was comparatively uneventful in that respect. This report will, therefore, be limited to a simple narration, from the official records, of the movements of troops which have taken place in the division.

Reference is respectfully made to the accompanying reports of the chief staff officers for the details of business transacted in their several departments.

MOVEMENT OF TROOPS.

Second Artillery.—Batteries B and H, of this regiment, which were in summer camp at Atlanta, Ga., broke camp November 29, and rejoined their permanent station, Fort Barrancas, Fla., November 30. The same batteries left Fort Barrancas July 11, of the present year, and returned to their summer encampment near Atlanta.

Third Artillery.—Light Battery C, Third Artillery, marched from Washington Barracks to Gettysburg, Pa., June 23 to 29, went into camp at Culp's Hill, near Spangler's Springs, and participated in the reunion, July 2, of the Veterans of the Third Army Corps. The battery broke camp July 5, and returned to its permanent station, arriving at the barracks July 9.

August 30, 1886, Battery D left Fort McHenry to march to Washington Barracks for long-range target practice. The battery arrived September 1, 1886.

Fifth Artillery.—In obedience to telegraphic instructions from the

War Department, of August 5, 1885, Battery K, Fifth Artillery, left Fort Schuyler, New York Harbor, September 10, and proceeded to Riverside Park, New York, as guard over the tomb of the late General U. S. Grant. The battery returned to Fort Schuyler October 11, 1885, being relieved on that date by Battery I, which was in turn relieved by Battery E, November 16, 1885.

Battery E was relieved December 16, 1885, by Battery M, and returned to Fort Hamilton, New York Harbor, same day. Battery M was relieved February 15, 1886, by Battery L, and was in turn relieved by Battery I, which remained in camp until June 30, 1886, when, in compliance with orders from the War Department of January, 1886, Camp Grant was discontinued, and the military guard permanently removed.

Batteries A and H, from Fort Columbus, Battery I, and a detachment of Light Battery F, from Fort Hamilton, attended the funeral services of the late Major-General Hancock, in New York and at Norristown, Pa., February 13. They left their respective stations in the morning and returned in the evening, the detachment of the light battery having been to Norristown and the foot batteries to New York.

May 31, 1886, the band, Light Battery F, and Batteries F and L, from Fort Hamilton, and Battery E, from Fort Schuyler, under the command of Maj. Marcus P. Miller, participated in the Memorial Day services, Brooklyn, N. Y. They returned to their respective posts same day.

Owing to insufficient facilities for small-arm firing at the several artillery posts in New York Harbor, a camp of instruction in rifle practice was established at Creedmoor, L. I., on Saturday, July 10. The camp was commanded by Maj. Marcus P. Miller, and was occupied successively by all the foot batteries stationed in New York Harbor, as follows: Batteries B, H, and M, from July 10 to 17, 1886; Batteries C, K, and I, from July 17 to 24, 1886; Batteries A, E, and I, from July 24 to 31, 1886.

Twenty-third Infantry.—September 29, 1881, in accordance with telegraphic instructions from the Adjutant-General of the Army, a guard, consisting of one officer and ten enlisted men, was established at Lake View Cemetery, Cleveland, Ohio, over the tomb of the late President Garfield. On June 30, of the current year, the guard was withdrawn and rejoined its station, Fort Wayne, Detroit, Mich., July 1.

August 28, 1886, Company D left Fort Porter and arrived at Fort Niagara for duty in connection with the department and division rifle competitions.

TARGET PRACTICE.

The annual rifle competition of this division upon the new range at Fort Niagara has been completed. The contests at Creedmoor, in which riflemen of this division are engaged, are now in progress, and the Army contest at Fort Leavenworth is to occur next week. The results thus far reported have been highly satisfactory.

MISCELLANEOUS.

April 13, 1886, seventy-seven Chiricahua Indian prisoners reached Fort Marion, Saint Augustine, Fla., from Fort Bowie, Arizona. The prisoners were under guard of Company E, Eighth Infantry, which started *en route* to Fort Bowie April 16, 1886.

During the labor disturbances which threatened Cincinnati in the month of May last, Companies D and E of instruction, general service, Columbus Barracks, Ohio, under command of Lieut. Col. Robert

H. Offley, Seventeenth Infantry, were ordered to Newport Barracks by the Secretary of War. They arrived May 6, and, order having been restored, left for Columbus Barracks May 16, 1886.

FIELD ARTILLERY.

I have the honor to repeat the recommendations heretofore made by me and by my predecessor in this command, that several batteries of field artillery be united at some suitable post for their better instruction. I believe this is considered by all artillery officers as one of the most desirable improvements that could be made in their arm of service.

FORTIFICATION AND ARMAMENT.

The subject of fortification and armament of the sea-coast has been so thoroughly discussed, and its great importance is now so fully and generally recognized, that nothing further need be added on that subject except to express my hearty concurrence in the plans submitted by the high Board organized under act of Congress.

I inclose herewith, in duplicate, the several reports of the staff corps at these headquarters, which exhibit, in detail, the operations of their respective departments during the year.

Very respectfully, your obedient servant,

J. M. SCHOFIELD,

Major-General, U. S. A., Commanding.

The ADJUTANT-GENERAL, U. S. ARMY,
Washington, D. C.

REPORT OF MAJOR GENERAL TERRY.

HEADQUARTERS DIVISION OF THE MISSOURI,

Chicago, Ill., September 10, 1886.

SIR: I have the honor to submit the following report of affairs in this military division since the report of Major-General Schofield, my predecessor in command, made on the 9th of October, 1885.

The division still consists of the four Departments of the Platte, Texas, Dakota, and Missouri; the limits of the first three remain unchanged, but on the 30th day of November, 1885, by General Orders No. 121, A. G. O., the district of New Mexico was temporarily detached from the Department of the Missouri and attached to the Department of Arizona, in the Division of the Pacific, and subsequently on the 4th day of May, 1886, by General Orders No. 25 (current series), A. G. O., this transfer was made permanent.

The Department of the Platte, until the 13th day of April, 1886, was commanded by Brig. Gen. and Maj. Gen. O. O. Howard. On that day, in pursuance of General Orders No. 15, Headquarters of the Army (current series), General Howard relinquished the command, and on the 28th day of April, 1886, in obedience to the same order, Brig. Gen. George Crook assumed command.

Brig. Gen. D. S. Stanley has remained in command of the Department of Texas during the year.

The Department of Dakota was commanded by Brig. Gen. and Maj. Gen. Alfred H. Terry until the 2d day of April, 1886, when by General

Orders No. 15, Headquarters of the Army (current series), he was relieved; he was succeeded, on the 6th of May, 1886, by Brig. Gen. Thomas H. Ruger.

The Department of the Missouri remained under the command of Brig. Gen. N. A. Miles until the 7th day of April, 1886, when by General Orders No. 15 (current series), A. G. O., he was relieved and Colonel (now Brigadier General) Thomas H. Ruger was assigned to the temporary command of it. On the 28th day of April, 1886, by General Orders No. 21 (current series), A. G. O., General Ruger was relieved and Brig. Gen. Joseph H. Potter was assigned to the command.

On the 9th day of April, 1886, in pursuance of General Orders No. 15, Headquarters of the Army (current series), A. G. O., Major-General Schofield relinquished the command of the division and it was assumed by myself.

The transfer of the district of New Mexico to the Department of Arizona diminished the number of troops serving in the division by the Thirteenth Infantry, seven companies of the Twenty-second Infantry, six companies of the Tenth Infantry, eleven troops of the Sixth Cavalry, and four troops of the Eighth Cavalry.

In addition to these organizations, and in pursuance of General Orders No. 40, Headquarters of the Army, A. G. O., June 23, 1886, the Ninth Infantry was, on the 20th day of July, 1886, transferred from the Department of the Platte to the Department of Arizona—and as a consequence to the removal of the Ninth—the Seventeenth Infantry, by General Orders No. 12 (current series), from these headquarters, was transferred from the Department of Dakota to the Department of the Platte.

One other regiment has left the division during the year—the Fourth Infantry—which, by General Orders No. 24, Headquarters of the Army, A. G. O., May 1, 1886, was transferred from the Department of the Platte to the Department of the Columbia; but its place in the Department of the Platte was supplied by the Second Infantry, which, by the same order, was transferred from the Department of the Columbia.

The present distribution of the troops of the division to the several departments and the distribution of the troops of the departments to posts is shown by the accompanying roster.

The past year has been a year of unusual quiet in the division, especially quiet in the Departments of Texas and Dakota. General Stanley in his annual report says that “the past as compared with former years has been a year lacking in events,” and General Ruger reports that “a state of quiet, in a general sense, has prevailed during the past year, but operations of a minor nature have been necessary to suppress predatory raids by Indians belonging on reservations, directed principally against Indians of other reservations, the tribes mostly concerned being the Crows, Piegaus, and Yanktonnais Sioux in Montana—and also raids by foreign Indians from the Canadian Northwest Territory against the Piegaus, Gros Ventres, and Crows, in Montana. Some duty has also been required of the troops, relative to the preservation of neutrality along the northern boundary, but in each instance it was found that rumors and representations of actual or intended violations of neutrality by persons from our territory had no foundation in reality.”

The most important event of the year in the Department of the Platte is the establishment of the new post to which, for convenience' sake, the temporary name of Fort Du Chesne has been given. This post is situated about three miles above the junction of the Du Chesne and Uintah Rivers, on a site selected by General Crook in person, and is garrisoned by two troops of the Ninth Cavalry taken from Fort McKinney, one

company of the Twenty-first Infantry taken from Fort Sidney, Nebraska, and three companies of the same regiment from Fort Fred Steele, the whole being under the command of Maj. F. W. Benteen of the Ninth Cavalry. These troops are now engaged in hutting themselves for the winter.

At present the route in use for communication with the new post is from Carter Station, on the Union Pacific Railroad, through Fort Bridger, and by it supplies for the troops are being forwarded; but probably a better route is that from Price Station, on the Denver and Salt Lake Branch of the Denver and Rio Grande Railroad, 125 miles south of Salt Lake City and about 71 miles from the post.

The greater number of the troops that, in September of last year, were sent to Rock Springs and Evanston, on the Union Pacific Railroad for the protection of the Chinese miners at those points, was withdrawn in the latter part of the succeeding October, but two companies of infantry were left at Rock Springs and one was left at Evanston. These companies were sheltered during the winter and are still sheltered in buildings provided by the railroad company. It has not been considered hitherto and it is not now considered prudent to withdraw them from these stations.

On the 1st of June last, under orders from the Lieutenant-General of the Army, a company of the Sixth Infantry was sent from Fort Douglas to the southeastern part of Utah to co-operate with a troop of the Fifth Cavalry, sent under similar orders to Southwestern Colorado, by the commanding general of the Department of the Missouri for the purpose of preserving the peace and protecting the lives and property of settlers in the region adjacent to the Blue Mountains, and in Dolores and La Plata Counties in Colorado. This company has been encamped during the summer on the North Fork of Montezuma Creek; the troop of cavalry has been encamped at Morgan's Mills on Lost Cañon Creek. All Indians in the vicinity of these troops have been quiet and peaceable during the summer; no depredations or acts of hostility have been reported.

General Potter's summary of the operations of the troops in the Department of the Missouri is as follows, viz:

The work of removing cattle from the Cheyenne and Arapaho Reservation, ordered by the President's proclamation, was completed by the end of December. During the entire spring and summer scouting parties have been frequently sent out from the posts of Fort Elliott, Supply, Sill, and Reno, for the purpose of expelling intruders from the Indian Territory and guarding against renewed intrusions; conducting unauthorized cattle therefrom; keeping herds, being driven through the Territory, on the authorized trails, and guarding these trails; quelling troubles between Indians and between cattlemen and Indians, and preventing Indians, from roaming off their reservations. To further these objects a troop of cavalry has been and is now at each of the following places: Chilocco Creek, Indian Territory, Cantonment, Indian Territory, and on the Washita River, east of Fort Elliott. Troop F, Fifth Cavalry, from Fort Supply, has also been detached for duty in Oklahoma.

The reports during the past month satisfy me that all the objects aimed at have been accomplished. This is due in no small degree to the cordial co-operation between commanding officers of posts and detachments, and Capt. J. M. Lee, Ninth Infantry, acting agent of the Cheyenne and Arapaho Indians, and to many valuable suggestions furnished by this officer.

Detachments have also been sent out to stop the cutting of timber in the Indian Territory.

In February a band of Kiowas reported to be committing depredations in Greer County, Texas, was taken back to their reservation by a troop of the Third Cavalry.

In June reported troubles between the settlers in the vicinity of the Kickapoo and Pottawatomie Reservations in Northeastern Kansas and the Indians of these tribes with reference to the grazing of cattle on Indian lands, were settled by dispatching a detachment of cavalry from Fort Riley, the commander of which acted in co-operation

with the agent. The settlers agreed to pay a stipulated price per head for the use of Indian land for grazing purposes.

Pursuant to instructions from headquarters Division of the Missouri, Troop D, Fifth Cavalry, was detached to Southwestern Colorado in June last and is now encamped at Morgan's Mills, on Lost Cañon Creek, Colorado, there to protect settlers from Indian depredations, co-operating with troops sent to Southeastern Utah from the Department of the Platte. There have been no depredations in that vicinity by Indians and no apparent dissatisfaction on their part or tendency to commit depredations. I have recently visited the camp at Lost Cañon; during my stay there I learned that the Indians had been quiet and peaceable during the past year.

The attempts to intrude upon and occupy the "Oklahoma" lands, which last year were so persistent, and to defeat which such active effort on the part of the troops was required, seem, for the time at least, to have ceased. General Potter, in addition to what he says on this subject in his annual report, forwards a report from Captain Price of the Fifth Cavalry, the commander of the camp on Chilocco Creek, Indian Territory, in which, under date, of September 1, he says:

The "boomers" have generally gone to work on the railways now building on the State line and across the Indian Territory. Their recognized leaders—including Couch—have personally assured me that no further attempts will be made to occupy Oklahoma in opposition to the present policy of the Government; they will await and respect the decision of Congress. A few would-be leaders in this vicinity made efforts during the summer to create an excitement and secure followers, but they signally failed. The general sentiment on the border is to submit in a law-abiding spirit to the decision of rightful authority. I have not had occasion during the past month to exercise military authority outside my command; the country hereabouts is now as quiet and orderly as any part of Kansas.

Since the last annual report of the division was made, two posts within the division have been abandoned—Fort Fred Steele in the Department of the Platte, and Fort Ellis in the Department of Dakota; each of them had survived its usefulness.

One important addition—important in a military sense—to the routes of transportation in the division has been made during the past year: the extension of the Fremont, Elkhorn and Missouri Valley Railroad. At the date of the last report of my predecessor the western terminus of this road was at Chadron, in Nebraska, but during the year it has been extended to "Douglass Station," close to the site of old Fort Fetterman, in Wyoming, and a branch has been constructed northward from Chadron to Rapid City, in Dakota. The most western point to which freight can be shipped on the main line is at present "Lusk Station," but this station is less than one-half the distance from Fort Laramie than Cheyenne Station, on the Union Pacific Railroad, is, the point from which hitherto supplies for that post have been shipped. Lusk is also much nearer—though how much nearer I have as yet been unable to ascertain—to Fort McKinney than is Rock Creek, the station on the Union Pacific from which supplies for that post have hitherto been shipped.

It is understood that surveying parties are now in the field for the purpose of determining the feasibility of an extension of the road to Buffalo City, in the immediate vicinity of Fort McKinney. The extension of the Rapid City branch has brought Fort Meade, Dakota, within 30 miles of railway communication.

The reports of the inspectors-general of the division and the departments, and the reports of the other staff officers, which are forwarded by the commanding generals of the departments, show that the supplies furnished by the Quartermaster's, Subsistence, Medical, and Ordnance Departments have been ample in quantity and excellent in quality; that the troops have been promptly paid, and that their condition in respect to drill and discipline is generally good. The acting inspector-

general of the Department of the Platte, however, reports that at the eleven posts inspected by him "the drill of the troops is defective and should receive more attention than is now given to it."

The insufficiency of the annual appropriations for barracks and quarters to keep the inhabited buildings at the posts in sufficiently good repair to make their inmates comfortable, is reported as usual.

As the annual rifle-practice season is not yet ended no comparison can be made between the results reached this year and those attained in previous years. It is, however, already known, that, as a rule, throughout the division target practice has been prosecuted with great spirit, and that post and company commanders generally are entitled to much praise for the zeal and energy which they have displayed in giving to their men instruction in this the most important part of their training. Unfortunately, there are still some few officers who do not appreciate the transcendent importance of this instruction, and who permit themselves to discourage the efforts of those who do appreciate it, by the expressions of opinion adverse to its absolute or comparative utility. These officers fail to understand that during the last twenty years a revolution has taken place in the art of war, second in time but not second in importance to that produced by the invention of gunpowder—a revolution which is, in some sense, a counter-revolution to that which followed the introduction of fire-arms. Prior to the introduction of fire-arms the most important factor in determining the strength of an army was the individual skill in the use of arms of the men who composed it, and history is full of examples of the success of small bodies of men skilled in the use of their weapons over great masses of untrained men. But the invention of gunpowder changed all this. The early fire-arms, and indeed the arms in use until a recent period, were so rude in design and so imperfect in construction that no skill in their use could be obtained, or at least no skill in their use could make their fire rapid and accurate or in any degree effective beyond the most limited range.

As a consequence, attempts to train the great mass of armies—the infantry—to the skillful use of their arms were given up, and the object sought by training was the power to move and act in concert, the power to maneuver with speed and precision, and, until recently, the distinction between bodies of drilled and trained soldiers and bodies of raw recruits was not so much in the difference of their ability to use their arms effectively, as in the ability of the one and the inability of the other to act in concert—to maneuver.

The invention, however, of the breech-loading rifle—the unexpected development of its powers—and the still less expected demonstration of a fact that experience has already taught us, the fact that all men, with but very few exceptions, if properly and *systematically* instructed, will become effective shots, has effected a counter-revolution, and once again the most important factor in computing the strength of an army must be the individual skill of the men who compose it. This counter-revolution seems to have been recognized by all nations. Its recognition is shown by the strenuous efforts made everywhere to train soldiers in the use of their arms, and by the efforts made by every nation to increase the range, the accuracy, and the rapidity of fire of its military weapons.

In the present condition of the art of war it is an undeniable fact that untrained men are an incumbrance rather than a power on the battle-field.

I would not be understood as undervaluing the utility of other training; the very perfection of the new arm and the effectiveness of its fire

demand increased mobility and the most thorough training in the movements prescribed by the tactics; I do contend for the paramount importance of this part of the soldier's instruction. Fortunately there is no conflict between the two. Our target season covers but four months of the year; with the preliminary theoretical instruction it occupies but five or six months, and even in these five or six months there is some time that may be devoted to other instruction. And if recruits at the beginning of their service are thoroughly set up and taught the elementary drill—and for the failure to so teach them there is absolutely no excuse—the remaining six months of the year give ample time and opportunity for teaching them all that a soldier should know.

In Lieutenant-Colonel Blunt's manual we have an admirable system of instruction; if its methods are exactly and faithfully followed the best results are certain, but we have not yet developed its full power nor obtained all the benefits that we may derive from it. Our troops, as a rule, have but just entered upon the practice of company skirmish firing, a drill invaluable to officers as well as to men; a drill enabling the officer to school himself in the art of controlling his men while in action; a drill simulating better than all others the movements and incidents of actual conflict and instructing both officers and men in what has been aptly termed "fire discipline."

The troops have received from the War Department and from the Lieutenant-General commanding the Army every possible encouragement to earnest and zealous efforts to perfect their instruction in this respect, and I have no change to suggest in the general rules and orders that govern the matter, but there is one point to which I think I should call attention. Prior to 1883 it was difficult to induce many of the best marksmen to compete for the position of representative of the company in the department competitions. They would, of course, fire the prescribed number of shots, but in many cases the scores made were much below those which the men were known to be capable of making. The reason for this disinclination to win the position was well understood and often frankly acknowledged—the position entailed upon the representative expense that he was unwilling to meet. By General Orders No. 41, A. G. O., series of 1883, commutation of subsistence was allowed at the rate of \$1.50 per day to each representative selected not only while traveling to and from, but while at, the place of competition. The effect of this allowance was very marked; small as it is it gave a surprising stimulus to practice in the companies; it constituted a company prize, and the best shots earnestly competed for selection. Recent legislation has forbidden the payment of commutation while at the place of competition though still permitting it to be paid while traveling. I cannot but regard this change as unfortunate; its effect has not been felt this year; it came too late to be felt; but I am sure that it will be severely felt another year, and I earnestly recommend that legislation be asked for, that will permit a return to the former rule. The saving effected by withholding commutation from the men while at the place of competition can hardly exceed \$8,000 annually, and perhaps never before was an economy so small effected at so great a risk to a public interest so important.

Any discussion of the present methods and conditions of warfare and the instruction that they necessitate inevitably leads to conclusions in respect to our present state of preparation for hostilities, either offensive or defensive, upon which I, perhaps, ought not to speak, for they belong partly to the legislator and partly to the soldier, and so far as they belong to the soldier they come within the province of the Lieut-

tenant-General commanding the Army rather than within the province of any of his subordinates; but these conclusions are so important that I venture to touch upon them. It is a proposition, that cannot be disputed, that it is no longer possible in any country to improvise an effective army. It is true that in times past there have been notable instances in which, in great emergencies, hastily raised levies, filled with enthusiasm and patriotic ardor, have successfully resisted trained and instructed troops, but there never has been a time, and it is quite safe to say that there never will be a time, when hastily raised levies of untaught men have been able or will be able in the open field to endure and effectively reply to such fire as instructed troops, armed with modern arms, can deliver. Of course, hastily raised levies can be armed with modern weapons, but of what value will such weapons be in the hands of men who do not know how to use them, compared with their value in the hands of men who have been taught to develop all their power?

It is a prevalent notion that our country is full of men who, by reason of service in the late war, are prepared to take their places in line of battle, and that the Government has but to speak the word to call, as from the earth itself, hosts not only of men but of soldiers. Those who entertain this idea forget that the great military strength of every nation lies in its men who are between twenty and thirty-five years of age, and that men who were over twenty years of age at the termination of the civil war are over forty now, and, moreover, they forget the equally important fact that none of the troops of either party to that contest received the training in the use of arms that the existing conditions of war demand. Much stress is often laid upon the great adaptability of our people to the profession of arms, upon the readiness with which they acquire military training, and, as a proof of it, successes obtained in the early days of the civil war are cited, but it must be remembered that in those early conflicts the vanquished were as untrained as the victors and that, consequently, these instances prove nothing either for or against the necessity of training. We must take it for granted that in our future wars we shall have to contend against trained and instructed soldiers. Are we prepared with our present organization and force to meet the possibilities or, it may be said, the probabilities of the future? We have in addition to the Army small bodies of militia kept on foot by the States, some portions of which are well organized, admirably drilled, and in some degree trained in the use of arms; but notwithstanding the advantages that our geographical position gives us, they, combined with the Army, would be but an insignificant fraction of the force that would be needed in case of war with any powerful military nation. If time were given us to prepare we should have no reason to fear any nation, perhaps no reason to fear any combination of nations, but powers that keep constantly on foot large bodies of instructed troops do not give time when they have an unready enemy to attack.

Trained and instructed troops perform two functions at the outbreak of a war—they meet the first onset of the enemy, and they also furnish the instructors who train newly raised men. Our present Army, with the instructed militia added, would be entirely insufficient for the performance of these two functions. I do not suppose that it will ever be the policy of the country to maintain an army which from a purely military point of view would be sufficient to guard against the dangers to which the country must expect to be exposed in the future. Two objections to the maintenance of such a force seem to be insuperable in the minds of our people, the expense of maintaining it and the danger

to which it might expose our liberties, but I submit that an army consisting of one man to each thousand of population would hardly be dangerous to the liberty of a people accustomed to self-government and habituated to local independent action, nor could it be a burden on the resources of any rich, industrious, and prosperous nation; and yet an army of that strength, organized in such manner as to permit a large expansion within itself at the outbreak of war, while it might not be able of its own strength to meet the first shock of battle would at least supply a respectable nucleus around which the forces of the nation could be gathered, and would certainly be able to furnish a multitude of instructors to convert newly raised men into trained soldiers.

I have the honor to be, very respectfully, your obedient servant,

ALFRED H. TERRY,
Major-General.

The ADJUTANT-GENERAL OF THE ARMY,
Washington, D. C.

REPORT OF MAJOR-GENERAL HOWARD.

HEADQUARTERS DIVISION OF THE PACIFIC,
Presidio of San Francisco, Cal., September 17, 1886.

GENERAL: I have the honor to submit the following report upon military operations and the condition of the Division of the Pacific, for the information of the Lieutenant-General, and to make some suggestions for his consideration.

Arriving in this division in April last, and assuming command of it and the Department of California, I have had but little time to familiarize myself with the details of its condition.

MOVEMENT OF TROOPS.

The transfer of the Eighth Infantry from the Department of California to the Department of Arizona, relieving the First Infantry, transferred to the Department of California; the transfer of the Ninth Infantry from the Department of the Platte to that of Arizona, and the transfer of the Second Infantry from the Department of the Columbia to the Department of the Platte, relieving the Fourth Infantry, ordered to the Department of the Columbia, are the principal movements of troops in this division.

COAST DEFENSE.

I had hardly assumed command of this division before I began to consider the means of defense against a possible invasion of the Pacific coast.

As the Board of Engineers has frequently reported, the entire coast is now unprotected by any system of "permanent works" worthy the name. San Francisco is the largest city on this coast, and is, in every way considered, far the most important. In fact, viewing the distance of San Francisco from Washington, the capital, it is in my judgment the first city of the United States that ought to be placed in a position of reasonable defense.

Had we been so unfortunate as to have gone to extremities with Chili, Mexico, or with Canada, involving Great Britain, notice how next to impossible it would have been to defend San Francisco against the approach and attack of iron-clad vessels.

The prevalent statement that under all circumstances numbers of brave, true men are a sufficient defense to any country is a palpable mistake. It is certainly inviting attack to present a rich and beautiful city to the greed of nations that assuredly are not yet wholly governed by benevolent considerations. The forts are not in order; they are not manned with guns of the proper caliber; and, what is worse, there are no guns of the right size and power in the whole country to bring here.

There should be a "plant" on this coast, and speedy preparations for making suitable guns; and other means of defense ought not to be delayed. Time is all important. True, the cost will be great, but the money will mainly go to the working classes of our people.

California is too fine a State to be left completely to the mercy of other nations, with whom any day we may have a serious conflict. Once lost, the regaining would involve millions more than the cost of a simple and proper system of defensive works.

Now shells could be easily thrown from the neighborhood of the Cliff House, outside the harbor, to every part of San Francisco, and without exceeding modern ranges, could be dropped even into Oakland. I therefore recommend that money be appropriated, so that a good torpedo defense may be planted; that Alcatraz Island be turned over to the Engineers, and the proposed fortifications completed thereon; that a fleet of torpedo-boats be constructed, and that the 8-inch converted and 15-inch guns now around the harbor be properly mounted; that two floating batteries be built and armored, as suggested by the Board of Fortifications appointed under act of Congress of March 3, 1885. This will tend to place this harbor, the western entrance to this country, in a defensible condition and hinder an enemy's entrance with a hostile fleet.

It would, however, as before remarked, do nothing towards preserving San Francisco from the fire of modern ships of war anchored outside the "Heads," and Oakland might be involved. To properly protect these cities, new forts, with heavy guns, would have to be built on the coast, supplemented by heavy cruisers, floating batteries, and torpedo-boats. Other cities on this coast are entitled to consideration, but they can better wait than San Francisco to be made secure.

CONCENTRATION OF TROOPS.

In pursuance of the approved policy of concentration, I would recommend that the garrison at Fort Winfield Scott, California, be discontinued and that the two batteries now there be stationed at the Presidio. This change has so commended itself to my judgment, and its early accomplishment seemed so necessary, that I have already made it the subject of a special report.

There seems no good reason why Fort Halleck, Nevada, should not now also be abandoned. It is 12 miles from the railroad, and possesses no paramount importance as a strategic point. There are few Indians in the vicinity; the nearest reservation (Western Shoshone) being over 100 miles north, in Idaho. There are but few settlers in that region, the whole country being covered with dense sage-brush, and these need no protection. These settlers are of course interested to some degree in keeping up the post, in order to have a market near at hand for what grain and other supplies they can raise. It is, considering its size, the most expensive post in the department. I earnestly recommend its early abandonment.

In this connection, I would invite attention to the special report of an inspection which I caused to be made of Fort Halleck, by Lieutenant Colonel McKeever.

In the Department of Arizona, now that the Indian troubles are virtually settled, there will no doubt be opportunity, to some extent, for concentration.

In the Department of the Columbia, Fort Klamath should be abandoned.

Other changes to this end might be suggested, but they are at present impracticable, owing to the failure of appropriations to make the necessary enlargement of posts for the accommodation of additional troops.

DISCIPLINE.

The conduct of the commissioned officers of the division has been good. Only three court-martial cases occurred during the past year (less than one-half of one per cent. of the number of officers in the division), *i. e.*, cases where the accused have been found guilty of breaches of discipline which called for condemnation in general orders.

PHYSICAL CONDITION.

The health of both officers and enlisted men has been excellent during the year. But three deaths of the latter have happened during this time in the Department of California. In some localities in the Department of Arizona, the health of the men has not been up to the standard, owing to the poor quality of water supplied. This evil will, as far as possible, be speedily remedied.

MORAL CONDITION.

It is believed that the class of men now enlisted is better than it has been for years. Whether this is due to more discrimination on the part of the recruiting officers or to a higher class of men available is not known.

The records show that while desertions are still numerous, aggravated crimes, such as would be brought before a general court-martial, are less than in former years.

Trials for "disorders and neglects" are mainly confined to petty offenses.

There is no greater safeguard against breaches of discipline than to create for the men, when not occupied with their duties, means of harmless amusement and recreation. The target practice, as it exists to-day, serves a double purpose of drill and recreation, and calls forth between companies and individuals a spirit of healthy rivalry. A well-equipped gymnasium, with an efficient instructor in charge, who should train the men in physical development, would be a sensible addition to each post. "Assaults at arms" and athletic exhibitions might be especially encouraged at stations adjacent to large cities, and thus evidence to a class desirable for recruits some of the attractions and advantages of the military service.

Post libraries and reading-rooms are well patronized and should receive every assistance. But at least 2 per cent. of the enlisted men can receive no benefit from them, being unable to read or write.

Attendance at the post schools should be made imperative, and not voluntary as now.

It has occurred to me that a distinction in the matter of pay might be made, as in the Signal, Ordnance, and Engineer Corps, with good results, between the sober, intelligent man who understands and performs his duty, and the worthless "ne'er do well," who does nothing satisfactorily and passes most of his time in guard-house or hospital. I sug-

gest that the former be rated as "first-class private," with higher pay, and of course be the man eligible for promotion; the latter as "second-class private," with lowest scale of pay. It might be well to refuse the benefit of additional pay authorized by act of May 15, 1872 (sec. 1261, Rev. Stat.), to the "second-class private."

The favorable influence which was anticipated by the regulation allowing the transportation, at public expense, of professional books belonging to officers, has already been felt, and is particularly noticeable in the increased interest taken by them in the literature of their profession. I would recommend broadening of the regulation, to include other scientific and literary works under reasonable limitations.

DESERTIONS.

The number of desertions occurring in the division during the year is less than for many years past. Under the present system of general recruiting, the five years' term of enlistment, and with the present ration too small and illy cooked, it is doubtful if the average of desertions from the Army will ever be much reduced. There are occasionally cases where desertion is due to mismanagement in the affairs of the company or post, to harshness or injustice, but these are few. The causes of desertion are, however, sometimes found in the men themselves. In view of the facts taken from reports regarding the foreign element in the ranks, and in our military prisons, it would seem that greater care should be taken in enlisting recruits of foreign birth. A reduction of the term of enlistment, or a system granting discharges under proper restrictions, would quickly lessen the number of desertions. The same would be true if there were a system of promotions to remunerative positions in other departments of the Government, thus affording greater inducements to a class of young men who now seldom enlist.

RECRUITING.

The recruits for the Department of California are enlisted almost wholly at the department and regimental recruiting offices. In view of this fact, I would recommend that in fairness the detail of enlisted men from this department on general recruiting service in the East be discontinued. The enlistment in this department may, in a measure, be taken as an example of "localizing," so often suggested, and in this case, at least, the results justify the belief, that if generally adopted in recruiting our Army, the results would be beneficial.

The people of a section would then have an interest in "their" regiments, and the relations of the Army and the people partake of a more intimate nature than now. With our small Army in constant motion, the objection that can be urged against such a departure from our present system would not have much weight.

INSTRUCTION.

The field instruction of officers at some of the posts in the Departments of California and Columbia has not been supplemented by theoretical teaching, no officers' schools having been held.

In Arizona, excellent practical instruction for the officers and men has been furnished by an active Indian campaign.

Target practice has received much attention, with corresponding good results. It still holds its interest for all concerned, and demands every officer and soldier. Could attendance at company and battalion drills be made as mandatory, the same excellence now lacking would

be observed in tactical movements. There is no cogent reason why every enlisted man, except one cook with each company, should not be required to give one hour out of the twenty-four to his profession. More attention could then be given to parts of a soldier's duties now slighted or totally neglected; for example, in the cavalry, to mounted firing and equitation; and, if an increased allowance of ammunition could be authorized for the artillery, to practice with the ordnance properly belonging to that arm.

As it does not seem to be understood that the enforced instruction of enlisted men in the common English branches was contemplated, and unless remedied as previously suggested, I would recommend as one of the requirements of a recruit before enlistment, that he should be able to read and write English.

I would recommend that more attention be given to the estimating of distances, especially by the officers. For them at least, proficiency in this is as important as good marksmanship. By means of a similar system of competition and marking it would be made as interesting and would soon command the same attention as rifle practice.

COURTS-MARTIAL.

With a view to economy and the equitable dispensing of justice, the enforcing of discipline by courts-martial should be simplified. A class of minor offences, clearly defined, could certainly be entrusted to company commanders; those of a more serious nature, including the rest of those usually brought before a garrison court-martial, and even some cases now referred to the general courts, should be turned over to the field-officers' court.

In view of the marked disparity in the length of sentences by general courts-martial in this division, it is recommended that the punishment for certain crimes be fixed by the War Department according to an equitable penal scale. The evident injustice where convicts in the same prison serve sentences which differ by three years for the same crime, committed under precisely the same circumstances, should be remedied by an authority which extends to the whole Army.

DIVISION AND DEPARTMENT HEADQUARTERS.

The division and department headquarter offices are now in barrack buildings at the Presidio, that are in fact inadequate to the purpose. These buildings are really needed for the garrison as quarters, as are also the officers' quarters, now occupied by part of the division and department staff. I think it would be better to erect a proper headquarter building, like that at Fort Snelling, Minnesota, on some ground separate from the Presidio garrison, probably on some obtainable lots in the city of San Francisco, near the business centers. This for the reason of speedier communication, supply, and transportation. It may not be the most economical to change headquarters as suggested, but it will be vastly better for the unity of command, the discipline of the garrison, and the comfort especially of the line officers, to effect a separation of them from the general staff. As now there is necessarily a divided responsibility where no actual division can be easily arranged, and certainly where none is desirable.

In case the headquarters remain on a military reservation, I recommend the erection of a proper building for their accommodation at some convenient point apart from the garrison. Or if removal to San Francisco proper should be deemed best, I suggest that the preliminary steps be taken necessary to such a removal. Plans and estimates can be for-

warded speedily after the wishes of the Lieutenant-General and the War Department shall be known.

QUARTERMASTER'S DEPARTMENT.

Attention is called to the inferior quality of the boots and shoes furnished the troops.

In this connection I ask consideration of the fact that the change in the facings of the infantry officer's uniform, to white, is universally condemned. Nine out of the ten officers would gladly incur the expense of a new set of trimmings could they return to the dark blue, or any other color that will not after the first week's wear look soiled and unrepresentable.

The purchase of cavalry horses for this division is a matter that deserves consideration. Good horses for cavalry service can be bought of breeders for from \$80 to \$100, but unbroken. The last horses offered by contractors cost \$140, and were poorly broken.

With the approval of the War Department, I would locate one or two troops of cavalry at the Presidio, use their horses if necessary to supply those immediately needed in other troops, then have horses purchased by the chief quartermaster from the horse breeders and bring them here, and have them thoroughly broken by the cavalymen.

The Presidio Reservation is large enough to furnish grazing for at least 200 horses the year round. This would insure a supply of horses well broken by cavalymen for the cavalry service of this division.

It is evident that there should be a change in the method of purchasing small items by contract, articles of trifling cost. It will be in the interest of economy to trust more to the honor of a purchasing officer in such cases.

The charge to the enlisted men for altering their clothing creates dissatisfaction among them. It is not right to make the charge.

SUBSISTENCE DEPARTMENT.

The subsistence stores purchased on this coast give comparative satisfaction. Especial complaint is made of certain stores sent from the East, principally of the canned goods.

There can be but little doubt that the "ration" is too small. Its composition should be improved. Oatmeal or cracked wheat would be a welcome addition to the soldier's bill of fare, especially for the morning meal. The meat ration, free of bone, is barely sufficient for dinner, and yet is frequently subdivided with a view to give increase to the morning and evening meals of "bread and coffee." The ration of fresh meat ought to be increased to 1½ pounds. An improvement in this important item, in quantity and in preparation, will result in a saving to the Government by eliminating a fruitful cause of desertion. I recommend that the mess-room furniture be supplied by the Subsistence Department, and not be a tax on the soldier's ration, as it now is.

Company cooks.—A ration, however sufficient, prepared as the average company cook does it, is not the best. The usual and the only fair way is to have the men take turns at this important work. Frequently the coffee is weak or cold, or both. The meat and vegetables are often burned or overseasoned, and generally speaking there is a lack of variety. A change in the manner of preparation of articles cooked will be attained by having an experienced cook. A good cook is worthy of his hire, and on this coast one cannot be enlisted, and few are made so during their brief terms of service in the kitchen. I would recommend this subject for especial attention.

Post traders.—The variety and excellence of the stores kept for sale by the Subsistence Department, and those which could readily be added, renders less necessary the presence of a post trader's establishment at a post, with his privilege of selling "light wines" and beer. If permits to sell these drinks to the men were taken away from these traders they could seldom exist.

A soldier given to drink can and does get just as drunk on wine and beer as on stronger drinks, and I think it is not exaggeration to say that four-fifths of our court-martial cases, with their attendant expense to the Government, have their origin at the post trader's bar. True, often drunkards are regulated and restrained through reliable post traders, but the mischief lies in encouraging others, especially young recruits, to spend their money for drink. Facts do not support the statement that sobriety is promoted by supplying wine and beer to the enlisted men.

INDIANS.

During my inspections of the forts in the Department of California I visited Fort Gaston and the Indians of the Hoopa Valley Reservation. The agent was an Army officer of high character, Captain Andrews, Eighth Infantry. He has since been relieved by Captain Dougherty, First Infantry, who has had experience with Indians, and is worthy of confidence. The latter gives me some insight into the previous circumstances of the inhabitants of Hoopa Valley, and abundance of facts relating to them and to the tribes on and off the Klamath (California) Reservation. It is, in substance, that a system of peonage had crept into the management of affairs at the agency, which was encouraged more or less by the Indian Department. For example, contractors for Government supplies hired the Indian farmers for what amounted to a mere subsistence. These contractors bidding for supplies for Fort Gaston invariably added to the cost of the articles the cost of transportation over the mountains 2 cents per pound, more or less. (Contract 1886, Arcata to Fort Gaston, \$1.90 in summer and \$2.85 in winter months per 100 pounds).

After receiving the contract, the contractors, being usually outside the valley, have employed the Indians to cut hay and wood upon the reservation at 30 cents per day. They have usually bought the wheat and barley of the Indians at the smallest figure, and, of course, supplied the Government at the contract price. Now, if the Quartermaster's Department, in such cases here and elsewhere where similar conditions exist, could be authorized, as has been done in many places, to purchase directly from the Indians, paying them the current market price, a great saving would be effected to the Government, and the Indians would be encouraged to industry and thrift, because they would get a reasonable compensation for their labor. The Hoopa Indians have one day-school, the average attendance at which is 31 out of 86 children of school age. Efforts are being made to place the affairs of this agency in the hands of a local civil official. Under the guise of philanthropy, interested parties are making every effort to install one of their number as agent.

The removal of the present military control would in my judgment be very unwise. The Indians themselves are opposed to any such change, recognizing that if left without military protection their valley would soon be overrun, and they themselves forced to the wall by unscrupulous intruders.

Klamath Indians.—Already encroachment on the boundaries of the Klamath River Reservation has begun, owing to their not being definitely fixed by recent survey. On this reservation there are no schools.

The Pi-Utes near Fort McDermitt remain quiet and peaceable, and a few of their children are at school.

The Nez Percés, including the returned "non treaties" and the Indians of the Columbia River region, are slowly improving their condition. The Nez Percés proper I consider the most intelligent and promising of our Indian tribes. General Gibbon recommends "that the sum of \$1,895.55, expended by the Subsistence Department in feeding the destitute Nez Percé Indians in the vicinity of Fort Spokane last fall, be recovered from the Indian Department." In this I concur.

Apache campaign.—On the 17th of May, 1885, a party of about 50 of the Chiricahua prisoners, headed by Geronimo, Natches, and other chiefs, escaped from the White Mountain Reserve in Arizona, and entered upon a career of murder and robbery unparalleled in the history of Indian raids. Since then, and up to the time of my assuming command of this division, they had been pursued by troops with varying success.

After the assassination of Captain Crawford, on January 11, by the Mexicans, the hostiles asked for a "talk," and finally had a conference, on March 25, 26, and 27, with General Crook, in the Cañon de los Embudos, 25 miles south of San Bernardino, Mexico, on which latter date it was arranged that they should be conducted by Lieutenant Maus, with his battalion of scouts, to Fort Bowie, Arizona. The march commenced on the morning of March 28, and proceeded until the night of the 29th, when, becoming excited with fears of possible punishment, Geronimo and Natches with 20 men, 14 women, and 2 boys stampeded to the hills. Lieutenant Maus immediately pursued, but without success. The remainder of the hostiles, including Chiefs Chihnahua and Josamé, some 57 in all, arrived at Fort Bowie on April 2. On April 3, before the arrival of General Miles in Arizona, the commanding general of that department was instructed by the Secretary of War to send all these Chiricahua hostiles just captured to Fort Marion, Florida. On the 7th of April they were forwarded under escort.

Simultaneously with my taking command of the division, Brigadier General Crook was relieved by Brigadier General Miles, who at once set out to complete the task commenced by his predecessor. Geronimo and his band were committing depredations, now in the United States and now in Mexico, and, being separated into small parties, easily eluded the troops, and carried on their work of murder and outrage.

Early in May General Miles organized the hostile field of operations into districts, each with its command of troops, with specific instructions to guard the water holes, to cover the entire ground by scouting parties, and give the hostiles no rest. An effective command under Captain Lawton, Fourth Cavalry, was organized for a long pursuit.

On May 3 Captain Lebo, Tenth Cavalry, had a fight with Geronimo's band 12 miles southwest of Santa Cruz, in Mexico, with a loss of one soldier killed and one wounded. After this fight the Indians retreated southward, followed by three troops of cavalry.

On May 12 a serious fight of Mexican troops with the hostiles, near Planchos, Mexico, resulted in a partial defeat of the Mexicans.

On May 15 Captain Hatfield's command engaged Geronimo's band in the Corona Mountains, suffering a loss of 2 killed and 3 wounded, and the loss of several horses and mules; the Indians losing several killed.

On May 16 Lieutenant Brown, Fourth Cavalry, struck the hostiles near Buena Vista, Mexico, capturing several horses, rifles, and a quantity of ammunition.

The usual series of outrages, with fatiguing chase by troops, continued until June 21, when the Mexicans engaged the hostiles about 40 miles

southeast of Magdalena, Mexico, and after a stubborn fight repulsed them and recaptured a young Mexican girl.

Captain Lawton's command with energy and persistence kept on the trail and eventually located them in the mountains near the place of the before-mentioned fight with the Mexicans. He finally surprised the camp of the hostiles 300 miles south of the Mexican boundary, capturing 19 horses and all their property and supplies. Thus for the fifth time in three months had the Indians been overtaken by the troops, and their stock been either wholly or partially captured. While these successes were not decisive, they were weakening the Indians and encouraging the troops.

About the middle of August Geronimo and his band were so reduced and harassed by the tireless pursuit of the soldiers that they made offer of surrender to the Mexicans, but without coming to terms. Their locality thus being definitely known, disposition of the troops was rapidly made to act in conjunction with the Mexicans to intercept Geronimo and force his surrender.

On August 25 Geronimo, when near Fronteras, Mexico, recognizing that he was pretty well surrounded, and being out of ammunition and food, made overtures of capitulation, through Lieutenant Gatewood, Sixth Cavalry, to Captain Lawton. He desired certain terms, but was informed that a surrender as prisoner of war was all that would be accepted. The Indians then proceeded to the vicinity of Captain Lawton's command near Skeleton Cañon, and sent word that they wished to see General Miles.

On September 3 General Miles arrived at Lawton's camp, and on September 4, Natchez, the son of Cochise and the hereditary chief of the Apaches, with Geronimo, surrendered all the hostiles, with the understanding, it seems, that they should be sent out of Arizona. I am not informed of the exact nature of this surrender at first deemed unconditional. *En route* to Fort Bowie 3 men and 3 women escaped, and are still at large.

In the early part of July, 1886, the subject was first broached of sending all the "Warm Spring" and "Chiricahua" Indians, then on the reservation at Fort Apache, some 450 or 500 in number, to some point outside of Arizona. This project seemed to meet with approval, and, as a preliminary step, on July 8 a delegation of these Indians under charge of an officer, was authorized to be sent to Washington in order to obtain their consent to a removal, and have them select a locality consonant with their wishes. The delegation went, with what success is not known; but during their return, about the middle of August, they were stopped at Fort Leavenworth, Kansas, and detained there.

Under date of August 25 the Lieutenant-General of the Army telegraphed to General Miles the decision of the President, that the latter would not entertain the proposition to move the Warm Spring and Chiricahua Indians at Fort Apache, Arizona, to any point west of the Mississippi River, but that the President, the Secretary of the Interior, Secretary of War, and the Lieutenant-General himself, agreed that they must be sent to Fort Marion, Florida. It seems that efforts were made by General Miles to have this decision changed, but without avail; for on August 27 the instructions of August 25 were reaffirmed.

On August 29 General Miles reported that these Indians were held by Colonel Wade under good control, and that they would be moved to Holbrook and thence by rail to Fort Union, New Mexico, and their stock overland to the same point. On the 2d of September he reported by telegraph that the Warm Spring and Chiricahua Indians would be

moved the next day, or the day after. He also recommended that he be allowed to send the Warm Spring band to Fort Riley, Kansas, and the Chiricahuas to Fort Leavenworth. On September 3, by peremptory order of the Acting Secretary of War, General Miles was directed to carry out the previous order of the President, and to have these Indians moved straight to Fort Marion, Florida.

On September 7 the Lieutenant-General telegraphed General Miles that his dispatch reporting "that it was expected to start Geronimo, Natchez, and other prisoners of the hostile band east on the 8th instant" was received, but that no decision had yet been reached as to disposition of Geronimo and his band. They being "prisoners of war, without condition," he was "hereby" directed to hold them in close confinement at Fort Bowie, Arizona, until the President's order should be communicated to him; but that this must not delay the removal of the Warm Spring and Chiricahuas by Colonel Wade. The President's decision was telegraphed General Miles the next day, and was in effect that the surrendered hostiles should be kept as prisoners until they could be tried, or otherwise disposed of, and that those to be sent to Florida should be started at once.

From a telegram sent General Miles, by the Acting Secretary of War, on September 9, in reply to his of the 8th, asking "that Geronimo, Natchez, and the other Apaches who had surrendered, be sent out of *Arizona to Fort Bliss or Fort Union, or to Florida*," came the first intimation to me that the hostiles had not surrendered "without conditions."

This telegram of General Miles, alluded to above, was sent to the President, who again reaffirmed his previous instructions, "to have them sent immediately to the nearest fort or prison, where they could be securely confined." Under date of September 9, General Miles first reported to me that "there is an erroneous impression regarding the Indian prisoners of war"; that "they surrendered with the understanding that they would be sent out of the country," and that "three men and three women escaped." He informed me in the same telegram that "for several reasons it was unsafe to hold them at Fort Bowie," and that "Captain Lawton had moved them east last night," September 8, and would be in San Antonio to-morrow, and at Fort Marion in four days, and reports that he (himself) goes "to Albuquerque to-night to attend personally to the removal of those from Apache"—i. e., the Chiricahuas and Warm Spring bands, under charge of Colonel Wade.

On September 10, presumably as soon as this action of General Miles was known at Washington, the Acting Secretary of War, issued orders to General Stanley to take charge of Geronimo, Natchez, and other hostiles recently surrendered, and securely confine them at San Antonio, Tex., until further orders, where they now are.

In some of the correspondence carried on by General Miles with those higher in authority than myself I have been left uninformed. Especially with regard to his own communications. The replies to him, being usually sent through my headquarters, give me but partial knowledge.

I think it most probable that this direct reporting arose from a dispatch sent by my predecessor to General Crook, authorizing him to save delay, to telegraph directly important news. Certainly, if this were done, a duplicate should have been forwarded at once to the responsible division commander. So much confusion arises from ignoring the prescribed channels, that I earnestly hope that such action of my subordinate commanders will not hereafter, except in plain emergency, be sanctioned nor encouraged.

Brigadier-General Miles, Capt. H. W. Lawton, Fourth Cavalry, and other officers with their soldiers who have borne a part in the late Indian campaign, deserve special mention and credit for the tireless energy with which it was prosecuted to a successful completion.

The very fewness of numbers of the hostiles in that boundless, rugged, and almost pathless country, rendered the difficulty of pursuit and final capture unusual, and it is hoped that the main causes of disquietude in Arizona and New Mexico are now over.

A proper punishment of the captured hostiles will go far to deter other Apache tribes from following the evil example of the Warm Spring and Chiricahua Apaches.

THE CHINESE.

The Chinese troubles of last spring at Seattle and Tacoma, Washington Territory, in this division, and at Rock Springs, Wyo., emphasize the fact that a serious element of disturbance exists in nearly every city and town on this coast. The well-known feeling of hostility towards the Chinese existing among certain classes of our people is likely at any time to find expression in riots such as these. Then only prompt action on the part of those whose duty it is to maintain the laws can avert the destruction of life and property. The relation between the Chinese population and the "companies," which seem to exert a mysterious control over them, is not known to me; but if, as claimed by large numbers who are hostile to the Chinese, they are held in bondage on our soil by them, and are when leaving China actually slaves, it will not be difficult to remove this evil. Yet until this statement is verified by a thorough and competent investigation and a remedy applied, the need of an ample United States force is apparent.

Brigadier-General Gibbon's report for the Department of the Columbia is full and explicit. All the disturbances referred to occurred prior to my taking command. He reports that "the troops in the department are in a satisfactory condition," and commends the effect of their concentration in large garrisons. His acting inspector-general exhibits too many irregularities on the part of post commanders in their administration to pass unnoticed.

Concerning them General Gibbon remarks "that the various irregularities and defects referred to will be corrected in time by calling the attention of the post commanders to the matters as they arise."

The annual report of Brigadier-General Miles has not yet arrived. It will be forwarded on receipt, with request that it form part of this report.

Besides other communications, those of the inspectors-general of the departments, and especially that of Lieutenant-Colonel Hughes, have afforded me valuable suggestions, some of which I have embodied in my report.

Special attention is called to the detailed reports of the department and the division staff attached.

I am, sir, very respectfully, your obedient servant,

O. O. HOWARD,
Major-General, U. S. Army.

ADJUTANT-GENERAL, U. S. ARMY,
Washington, D. C.

REPORT OF THE ADJUTANT-GENERAL.

WAR DEPARTMENT,
ADJUTANT-GENERAL'S OFFICE,
Washington, October 9, 1886.

SIR: I have the honor to submit my annual report for the year ending September 30, 1886.

MILITIA.

In accordance with requests of State authorities, officers of the Army were detailed during the past summer and fall to inspect militia encampments at the following points:

Alabama.—At Mobile and Selma, by Capt. R. G. Howell, Second United States Artillery.

Connecticut.—At Niantic, by First Lieut. O. A. L. Totten, Fourth United States Artillery.

Dakota.—At Aberdeen, by Lieut. Col. E. F. Townsend, Eleventh United States Infantry.

Illinois.—At Springfield, by Capt. G. Lawson, Twenty-fifth United States Infantry.

Indiana.—At La Fayette, by Maj. R. Lodor, Third United States Artillery.

Iowa.—At Oskaloosa and Marshalltown, by Col. R. I. Dodge, Eleventh United States Infantry.

Kansas.—At Fort Riley reservation, by Lieut. Col. O. E. Compton, Fifth United States Cavalry.

Kentucky.—At Crab Orchard Springs, by Capt. J. L. Tiernon, Third United States Artillery.

Maine.—At Bangor, by Capt. E. Field, Fourth United States Artillery.

Massachusetts.—At South Framingham, Hingham, and Essex, by Capt. G. B. Rodney, Fourth United States Artillery.

Michigan.—At Island Lake, by Maj. A. C. M. Pennington, Fourth United States Artillery.

Minnesota.—At New Ulm and at White Bear Lake, by Maj. J. M. Bacon, Seventh United States Cavalry.

Missouri.—At Sweet Springs, by Capt. T. Schwan, Eleventh United States Infantry.

New Hampshire.—At Concord, by Lieut. Col. H. W. Closson, Fifth United States Artillery.

New York.—At Peckskill, by Maj. R. H. Jackson, Fifth United States Artillery.

Ohio.—At Washington Court-House, Springfield, Mount Vernon, and Sandusky, by First Lieut. A. P. Blocksom, Sixth United States Cavalry.

Pennsylvania.—At the various regimental encampments, by Maj. W. J. Volkmar, assistant adjutant-general.

Rhode Island.—At the State Camp Ground, by Col. C. L. Best, Fourth United States Artillery.

Vermont.—At Burlington, by First Lieut. W. H. Coffin, Fifth United States Artillery.

The reports, submitted herewith, of the several officers designated by the War Department to inspect the encampments of State troops are highly interesting and worthy of careful consideration. While just but kind criticism points out many defects (none that cannot be remedied by men exhibiting the military zeal and pride that animate the State militias), the reports unmistakably evidence a slowly maturing temper

and character destined to still more closely unite the Regular Army and the militia, the twin parts of the defensive power of the Government.

A careful perusal of these reports leads me to make the following general remarks :

State encampments, to be of absolute benefit, should at least be of ten days' duration, and, while established at convenient points looking to economy in the concentration of the troops, should be at a sufficient distance from the homes of the members of the command in order to overcome business and social influences, which seriously affect efforts at imparting instruction and holding the men in hand for drills, target practice, guard duty, &c. Camps should be divested of every appearance of holiday character.

The programme of military exercises should exclude elementary company drills, and the time of the encampment devoted to instruction and practice in skirmish and battalion drills and guard duty. As most of the fighting in the future must be done in open order, a thorough acquaintance with the skirmish drill is of the highest importance.

Officers should be required to recite upon the duties of guards and sentinels, and instruction in guard duty be given to the men in the armories.

So far as fatigue uniform or dress for field service is concerned, it would be of advantage for the authorities of each State to prescribe a simple, plain, but serviceable fatigue uniform for all its troops to which companies might gradually conform within a limited time, say one year. This is not intended to interfere with the right of each command to wear such full-dress uniform as it may have selected for wear on reviews, parades, and other occasions of pure ceremony.

Obsolete arms and ammunition in the hands of State troops should be replaced by improved guns of same pattern as in the hands of the Regular Army, and suitable ammunition provided. On this subject I beg to renew the recommendation made in my last report.

Exhibition drills, while interesting as showing to what degree of mechanical precision a body of men can be trained to attain in movements and motions, are an undesirable feature of military camps. In many instances the development of extreme smartness in drill involves the neglect of some of the most important and solid parts of a soldier's training.

The report on the target practice at the Maine encampment is most creditable to the troops participating, and demonstrates what results can be obtained from careful instruction and practical discipline in this important exercise. The great want is a thorough, systematic course of instruction prescribed from State headquarters and rigidly insisted on, and the establishment in each State of an examining board, before whom ignorant and incompetent officers could be brought with a view to their elimination from the military service of the State. Every officer elected should, before appointment, be subject to examination by a board of officers, of which, if possible, the regimental and brigade commanders and the inspector-general should be members. The material composing the militia of the several States is generally excellent, and zeal and intelligence the rule; but the former must be wisely directed and the latter systematically cultivated.

MILITARY COLLEGES.

The tables submitted exhibit the apportionment of details corrected to October 1, 1886, and a synopsis of the data contained in the reports of the several officers performing the duties of professor of tactics and military science.

These reports show a steadily growing interest in military instruction, as evidenced by the increased percentage of students attending drill, &c., and the degree of appreciation of the value of the system on the part of the college authorities. The aptitude of American youths for military exercises is undoubtedly good, and, when supplemented by the frank and full recognition on the part of the several faculties that military training (beyond the enforced physical exercise it gives) is of positive service to the student in the ordinary avocations of civil life, will realize all the practical advantages resulting from a course of instruction enforcing manliness of character and deportment.

To reap, however, the full benefits of the law authorizing the detail of officers of the Army as military instructors, it is imperative that the professor of tactics and military science be a recognized member of the faculty of the institution at which on duty, with equal vote, and that military instruction be given a co-ordinate position with the other departments of study.

REGULATIONS OF THE ARMY.

The amendments and changes in the Regulations rendered necessary to make the latter conform strictly with existing laws have become so numerous that a new edition is an imperative need and is earnestly recommended.

DISCHARGES.

The increasing frequency of applications for discharge from the Army makes the adoption of measures that will protect the Government from loss a wise provision. I beg, therefore, to recommend that the attention of Congress be called to the need of legislative action making all discharges by favor conditional on the reimbursement to the Government of the expense of recruiting and transportation, or a fixed sum, say \$100, except in cases where long and faithful service on the part of the man constitutes a controlling element of favorable consideration.

RETIREMENT OF VETERAN SOLDIERS.

The law of February 14, 1885, authorizes the retirement from service of old and faithful soldiers on the completion of thirty years' military service. With the view to facilitate the preparation of estimates and simplify the present cumbrous mode of payment, I beg to urge the adoption of the scheme submitted in my last report, grouping the several grades into thirteen classes and fixing a gross sum as the total monthly pay of each class, payments to be made by the Pay Department.

Four deaths occurred during the past year, and four applications for retirement are now pending.

THE MILITARY PRISON.

The Military Prison at Fort Leavenworth, Kansas, has been maintained during the past year, and its business operations have not materially differed from those of the previous year. Scarcely any progress has been made in bringing its capacity to the point required to afford accommodations and profitable employment for all the military prisoners who should properly be sent there. The estimates for money necessary to maintain and improve the prison were prepared with extraordinary care and exactness, and with a detail of statements seldom found in such papers, and it is greatly regretted that the appropriations fell below the amount indicated, as they of necessity limited the

operations to the existing capacity, and forbade necessary expansion. Another consequence has been the detention of prisoners at posts in the several military departments until they could, by the occurrence of vacancies at the prison, be transferred there in small detachments. In my last report I had to report the fact that transfers to the prison were temporarily suspended owing to the exhaustion of the reduced appropriation for subsistence, and I am now obliged to report the insufficiency of the appropriation for payment of the small donations to prisoners on discharge, and cannot too much regret the limitation of operations for the public interest, the more so that such operations are for the remedying an evil seriously affecting an important branch of the public service.

The impression seems to prevail to some extent among those who have not had an opportunity to observe the influence of the prison that the punishment is not sufficiently rigid, and that the care and comfort of the prisoners are made too prominent to secure good results in an exemplary way. It is not my purpose to discuss the question of value to be given to the recognized methods of prison discipline as now applied under the influence of the more humane views of the present day, but the persistent efforts made by the prisoners to obtain release is evidence that the experience they are required to undergo is not regarded by them as a lenient condition. During the past year six hundred and thirty applications for clemency have been received, three-fourths of which were made by the prisoners through the regular military channels, and the remainder through or by friends who have sought what they believed the best and strongest influence to secure favor.

The prisoners have all been usefully employed, and the results of their labor will be found stated in detail in the accompanying report of the commandant of the prison.

The money value of the work performed by prisoners in the manufactures is \$39,835.30, which is within \$500 of one-half of all the expenses of the prison for the year. The value of skilled labor is rated at 50 cents per day, and that of ordinary labor at 35 cents. The number of days reported by the commandant is 90,460 of the former and 82,107 of the latter, the value of which, \$73,967.45, is within not quite \$6,000 of the entire expenses of the prison. There seems to be no reason to doubt that as soon as the expense of extension and building shall cease the prison will be practically self-supporting. If the estimates which have been made for the next fiscal year be approved and full appropriation made, that much-desired state of self-support will, in all probability, be reached by the beginning of the succeeding year.

The inspections of the prison required by law have been regularly made. It gives me pleasure to state the commandant maintains the high character for active efficiency earned by him during his past administration of the affairs of the prison.

GOVERNMENT HOSPITAL FOR THE INSANE.

The following is a list of persons committed to the Government Hospital for the Insane under the orders of the honorable the Secretary of War during the year ending September 30, 1886:

Officer of the United States Army	1
Enlisted men of the United States Army.....	31
Late soldier of the United States Army	1
Late volunteer soldiers	2
Hospital matron.....	1
Military prisoners.....	7
Total.....	43

WORKING OF THE OFFICE.

The clerical and other force of this office remains the same as at the date of my last report.

The following table exhibits the work of the Enlisted Volunteer Pension Branch and other divisions of the office engaged in the preparation of reports on claims for pension, bounty, homestead grants, &c.:

Statement of calls from the Commissioner of Pensions, Second Auditor, &c., for full or partial histories of officers and men of the late volunteer forces, in connection with claims for pension, bounty, back pay, subsistence, land claims, lost horses, &c.

	On hand October 1, 1885.	Received during the year.	Total.	Finished during the year.	On hand October 1, 1886.
<i>Commissioner of Pensions.</i>					
Enlisted Volunteer Pension Branch	19,928	117,683	137,611	93,701	43,910
Colored Troops Division	1,520	6,554	8,074	5,010	3,064
Volunteer Service Branch	703	15,789	16,492	15,512	980
Total	22,149	140,026	162,175	114,223	47,954
<i>Second Auditor.</i>					
Enlisted Volunteer Pension Branch	1,897	33,916	35,813	30,899	4,914
Colored Troops Division	576	2,934	3,510	3,168	342
Volunteer Service Branch	647	4,728	5,375	3,650	1,725
Total	3,020	41,578	44,598	37,717	6,981
<i>Third Auditor.</i>					
Volunteer Service Branch	23	541	564	506	58
<i>General Land Office.</i>					
Enlisted Volunteer Pension Branch	635	1,516	2,151	1,448	703
Colored Troops Division		23	23	23	
Total	635	1,539	2,174	1,471	703
<i>Subsistence Department.</i>					
Enlisted Volunteer Pension Branch	865	1,527	2,392	1,503	889
Colored Troops Division	2	55	57	57	
Total	867	1,582	2,449	1,560	889
<i>Pay Department.</i>					
Colored Troops Division		964	964	964	

RECAPITULATION.

Number of calls from all sources:

On hand October 1, 1885	26,204
Received during the year	190,239
Finished during the year	114,443
Remaining on hand October 1, 1886	101,999

Of the number reported on hand, 6,826 are completed so far as the records of this office are concerned, but have not yet been returned from the Surgeon-General's Office, to which they were referred for supplemental report.

The above exhibit shows gratifying results. While the calls received from all sources during the year are 25,238 in excess of the number received during the preceding year, the increase of 13,590 reports over

the number completed during the year 1884-'85 demonstrates commendable activity and zeal on the part of the force employed in this important work.

The labor of preparing briefs for action on applications for remuster under the provisions of the act of June 3, 1884, has progressed as satisfactorily as could reasonably be expected from the number of clerks employed, which number is limited only by the available desk room in the Volunteer Service Division, and my inability, with present accommodations, to provide additional working space that necessarily should be within convenient reach of the records that must be examined in the preparation of reports. Of this class of claims 10,852 were on hand October 1, 1885, 5,308 have been received during the year, and final action taken on 1,975 cases, leaving 14,185 claims awaiting investigation and action.

At the close of the late war there were at large 230,000 men against whose names on the rolls the charge of desertion had been entered. It would be a liberal estimate to assume that the cases of 100,000 of these men had been acted upon *prior* to the passage July 5, 1884, of the law providing for the removal of the charge of desertion, thus leaving 130,000 cases to be presented for action. Up to October 1, 1886, 47,354 applications have been received, and of this number 35,000 were rejected as not coming within the provisions of the law of July 5, 1884, or of the supplementary act passed May 17, 1886; in 5,765 cases the charge was removed, and 1,989 applications were denied as not warranting favorable action. There remains now on hand 4,600 claims, of which 2,460 are simple applications for removal of the charge of desertion, and 2,140 are pension cases in which desertion is charged against the claimants in former reports of their military status.

It will be seen from the above statement that there still remain about 83,000 men charged with desertion who have not yet made application for the removal of the charge, but it is fair to presume that nearly all will do so. The fact must also be recognized that the rejected cases *are never closed*, but are liable to be called up for reconsideration on appeals submitting additional testimony, which must be examined to determine its value or relevancy.

The work of investigating each case and preparing a brief of facts for action involves patient and careful examination of numerous records—muster-rolls, company and regimental books, hospital records, &c., and demands thorough acquaintance with the minutiae of military papers, clear judgment, and untiring industry.

The preparation of briefs in pending cases will be pushed as rapidly as the necessarily limited clerical force (in view of other pressing demands) I have been able to assign to this work will permit.

The great increase of calls from the Pension Bureau, as stated in this report, and the rapid accumulation of applications for remuster and for the removal of the charge of desertion, coupled with the fact that, recognizing the importance of prompt rendition of reports in pension and kindred cases, I have kept the other divisions of the office with a barely sufficient force to transact current business of the Army, leaves me no other alternative but to urge that Congress be asked to authorize the employment of twenty-five additional clerks to enable me to meet, with some success, the increased volume of business devolving on my office.

I have felt it my imperative duty in former reports to call attention to the important question of preservation of the official records (muster-rolls) from which reports are made to the Pension Office and other bureaus of the Government in pending claims of various kinds. The de-

plorable condition of many of these rolls, from causes which I have heretofore set forth at length, is steadily growing worse, and their absolute destruction is only prevented by the exceeding great care exercised in handling them. To secure to the Government the important information they contain, I beg to recommend the employment, outside of office hours, of a number of my best clerks for the purpose of copying the most dilapidated rolls, and that an appropriation be asked of Congress to compensate the clerks engaged in this extra work, of necessity to be done at night, at a rate computed on the basis of their current salary and the number of hours in which so employed.

In closing this report it gives me sincere pleasure to bear testimony to the general intelligence, zeal, and efficiency of my clerks.

Respectfully submitted.

Hon. WILLIAM C. ENDICOTT,
Secretary of War.

R. C. DRUM,
Adjutant-General.

REPORT OF THE ACTING JUDGE-ADVOCATE-GENERAL.

WAR DEPARTMENT,
JUDGE-ADVOCATE-GENERAL'S OFFICE

October 1, 1886.

SIR: In compliance with your instructions of August 12, 1886, I have the honor to submit the following report of the business of this office for the year ending September 30, 1886:

Commissioned officers tried by general courts-martial:

Number of records reported upon and submitted to the Secretary of War for the action of the President.....	4
Number of records received, revised, and recorded not requiring the action of the President (convicted 12, acquitted 6).....	18

Cadets of the United States Military Academy tried by general courts-martial:

Number of records reported upon and submitted to the Secretary of War	6
Number of records received, revised, and recorded not requiring further action (convicted 1)	1

Enlisted men tried by general courts-martial:

Number convicted of desertion.....	426
Number convicted of offenses other than desertion.....	1,349
Number acquitted, or sentences disapproved by the reviewing authority	131

Military convicts tried and convicted by general courts-martial..... 1,946

Total number tried..... 1,963

Number of records of courts of inquiry received, &c.....	2
Number of reports and opinions rendered upon proceedings of courts-martial, miscellaneous questions of law, applications for clemency, and other official matters	1,166
Number of official applications from the War and Treasury Departments and Pension Office for abstracts of proceedings of trials, answered.....	1,185
Number of copies of records of proceedings of general courts-martial furnished	111
Of which 85 copies, containing 5,003 pages, were furnished to parties tried, and 32 copies, containing 483 pages, were furnished to the Pension Office, and other executive offices and Departments. Total number of pages, 5,482.	

The number of records of garrison and regimental courts-martial which by the act of March 3, 1877, are no longer required to be forwarded

to this office, and which have been received and filed in the departments in which the courts were held, is as follows:

Department of Arizona.....	879
Department of California	327
Department of the Columbia	926
Department of Dakota	2, 164
Department of the East	1, 474
Department of the Missouri.....	1, 512
Department of the Platte.....	1, 940
Department of Texas.....	848
Courts-martial convened by commanders of corps under the 81st Article of War.....	155
Total.....	10, 225
Total number of cases tried by general and inferior courts-martial during the year ending September 30, 1886.....	12, 208
Number of cases tried last year.....	14, 179
Decrease from last year of cases tried by general courts-martial (the first decrease in the last seven years)	345
Decrease from last year of cases tried by inferior courts-martial	1, 626
Total decrease	1, 971

Of the whole number of cases tried by inferior courts-martial (10,225), 281 resulted in an acquittal of the men tried, while 6,418 represents the number of different enlisted men tried, many men having been tried more than once during the year.

It should be remembered that a very considerable number of the trials by general courts-martial are for minor offenses, as are all the trials by garrison and regimental courts. By these inferior courts the punishment cannot exceed a fine of one month's pay, or imprisonment for one month. In a large number of cases the punishment is less than this. Nevertheless, as commanding officers have not in our service the power of punishing summarily, there is no other way of punishing for trivial offenses than by court-martial. Therefore, the statistics here given show the whole number of offenders who have received punishment in our Army for the year ending September 30, 1886. In armies in which the power of summary punishment exists—that is to say, in the armies of all civilized nations, except our own—the court-martial is relieved from the trial of the lesser derelictions of duty, and the statistics of the trials in such armies will not show the number of cases summarily disposed of—cases such as we have no way of reaching except by trial by court-martial.

SUMMARY PUNISHMENT.

The large number of trials by garrison and regimental courts-martial for the year ending September 30, 1885, attracted the notice of those in authority, and subsequently a bill was introduced into the Senate giving to certain officers the power of summary punishment in certain cases. This, however, failed to become a law.

It may be safely stated that the Army is of one opinion on this subject, and that this power, within certain narrow and well-defined limits, may without danger of abuse be intrusted to commissioned officers. The advisability of such a measure has not, I think, been questioned. The principal question seems to have been as to the person to whom the power should be intrusted. One plan proposed is to vest this power in the second in command at a military post. As to this I am of opinion that it is not sufficiently elastic to meet all cases, inasmuch as the

second in command may, in consequence of his relations to the offender, his own personal unfitness, or other reasons, be disqualified for the important trust. But it would not be difficult to devise a system, if the principle can secure recognition. Summary punishment is provided for by the English code, by virtue of which the commanding officer—

may take steps for bringing the offender to a court-martial, or in the case of a soldier may deal with the case summarily.

Where he deals with the case summarily, he may—

(a) Award to the offender imprisonment, with or without hard labor, for any period not exceeding seven days; and

(b) In the case of the offense of drunkenness, may order the offender to pay a fine not exceeding ten shillings, either in addition to or without imprisonment with or without hard labor; and

(c) In addition to or without any other punishment, may order the offender to suffer any deduction from his ordinary pay authorized by this act to be made by the commanding officer.

* * * * *

A constant resort to formal courts for the punishment of trivial derelictions of duty is extremely disheartening and demoralizing to the offender, and, moreover, is sometimes, in the absence of the necessary number of officers at a post, accompanied with serious delay.

Officers differ in their understanding of their relation to enlisted men, as well as in their character for independence. The consequence is that whereas one company commander will bring every case, however insignificant, before a court-martial, another will find a more expeditious way of disposing of trifling lapses from duty, as, for example, by a deprivation of privileges. Such a difference in the treatment of soldiers should not exist; it is not just. For these, as well as other reasons, it is desirable that the power of punishing summarily should to some extent supersede the trial by garrison or regimental courts.

CIVILIAN WITNESSES.

In the present condition of the law, to procure the testimony of a civilian before a court-martial may sometimes be impossible. In an opinion of this office dated August 27, 1885, it was held that, in the absence of legislation to that effect, a court-martial had no power to punish for contempt a civilian who, having been summoned as a witness, and having appeared, refused to testify. An opinion to the same effect was afterwards given by the Department of Justice, and the War Department has accepted these opinions as correct. This, however, leaves the court-martial in a very helpless condition, one which is likely sometimes to lead to an entire failure of justice.

Article 126 of the British Army Act provides as follows:

126. (1) Where any person who is not subject to military law commits any of the following offenses, that is to say:

(a) On being duly summoned as a witness before a court-martial, and after payment or tender of the reasonable expenses of his attendance, makes default in attending; or

(b) Being in attendance as a witness—

(i) Refuses to take an oath legally required by a court-martial to be taken; or

(ii) Refuses to produce any document in his power or control legally required by a court-martial to be produced by him; or

(iii) Refuses to answer any question to which a court-martial may legally require an answer.

the president of the court-martial may certify the offense of such person under his hand to any court of law in the part of Her Majesty's dominions where the offense is committed which has power to punish witnesses, if guilty of like offenses in that court, and that court may thereupon inquire into such alleged offense, and after ex-

amination of any witnesses that may be produced against or for the person so accused, and after hearing any statement that may be offered in defense, if it seem just, punish such witness in like manner as if he had committed such offense in a proceeding in that court.

In this country there is no appeal from a military to a civil court, and no such proceeding as carrying a contempt of the orders of the former before the latter for punishment. If there were, it would probably not accomplish its object, as our courts-martial often sit at too great distances from any civil courts to make this a practical solution of the difficulty. It would, in my opinion, therefore, be best to intrust this power to the court-martial itself.

In the articles for the government of the Navy this is provided for; article 42 of that code being as follows:

ART. 42. Whenever any person refuses to give his evidence, or to give it in the manner provided by these articles, or prevaricates, or behaves with contempt to the court, it shall be lawful for the court to imprison him for any time not exceeding two months.

MEASURE OF PUNISHMENT.

The great latitude allowed by our Articles of War in fixing the amount of punishment for military offenses is a noticeable and objectionable feature. By forty-two of the fifty-four articles which constitute the penal code, the punishment is left to the discretion of the court-martial. The consequence is that, owing to the differing composition of such courts as to the age, experience, and characteristics of their members, and of the different convictions maintained by reviewing authorities, similar offenses are often punished with greatly varying degrees of severity; and this again often leads to a subsequent partial equalization of punishment by an exercise of the pardoning power. Punishment is most effective when evenly awarded and rigorously enforced, and it seems to me to be very desirable that, so far as possible, a scale of punishment should be adopted which would reduce the amount of dissimilarity now existing. This dissimilarity is very marked in the case of desertion but it is not confined to that offense.

As an instance of what is possible under our present system, attention is invited to the following cases, reported in one of the annual reports of the Department of Texas, viz:

At Fort A, Private B was found drunk while *a sentinel on post*; the commanding officer caused him to be tried by a garrison court-martial; he was convicted and suffered confinement at hard labor for one month, with forfeiture of ten dollars of his pay during the same period. At Fort B, Private D was found drunk while *a member of the post-guard*; the commanding officer forwarded his case for trial by a general court-martial; he was convicted and sentenced to confinement for six months and forfeiture of ten dollars of his pay for the same period. The records did not exhibit any mitigating features in either case. Thus, the soldier who committed the greater offense received one-sixth of the punishment awarded the one convicted of a violation of the same article of war, but consisting of an offense of a lesser degree.

An equalization of punishment was undertaken by General C. U. Augur, when in command of the Department of Texas, by recommending in orders (General Order No. 19, Headquarters Department of Texas, San Antonio, Tex., September 19, 1883) a scale of punishment for the adoption of the courts-martial of his department, and the result is understood to have been very satisfactory; but the evil should be remedied by legislation applicable to the entire Army.

Very respectfully, your obedient servant,

G. NORMAN LIEBER,
Acting Judge-Advocate-General.

Hon. WILLIAM O. ENDICOTT,
Secretary of War.

REPORT OF THE QUARTERMASTER-GENERAL.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., October 9, 1886.

SIR: I have the honor to submit the annual report of the operations of the Quartermaster's Department during the fiscal year ending June 30, 1886.

The balance in the Treasury to credit of the Quartermaster's Department at end of June 30, 1885, was, as by last report (including \$48,902.60 pertaining to Signal Service, disbursed by Quartermaster's Department)	\$566,075 00
Appropriations for the fiscal year for the service of the Quartermaster's Department, &c., were as follows: Acts of March 3, 1885, February 2, 1886, and March 26, 1886 (including appropriation of \$184,579.29, pertaining to Signal Service, disbursed by Quartermaster's Department)	9,902,862 48
Amounts deposited to the credit of appropriations and received from sales to officers.....	526,925 96
Total.....	10,995,863 52
Remittances to disbursing officers have amounted to.....	\$9,538,913 43
Requisition to pay settlements made at the Treasury on claims and accounts.....	562,548 48
Carried to surplus fund (act June 20, 1874).....	182,518 40
	<hr/> 10,283,980 31
Leaving balance in Treasury undrawn at end of June 30, 1886 ...	711,883 12

The tables, statements, abstracts, &c., which accompany this report will be found to give the items of appropriations, expenditures, and disbursements in all their details.

DUTIES OF THE QUARTERMASTER'S DEPARTMENT.

Under sections 219 and 220, Revised Statutes, and the authority of the Secretary of War, the Quartermaster's Department transports troops, munitions of war, equipments, military property, and all articles of supply from the places of purchase to the several armies, garrisons, posts, and recruiting places; provides for the safe-keeping of such articles; the distribution, adequate and timely supply of the same to the regimental quartermasters and to such officers as may, by virtue of the Secretary of War's regulations, be intrusted with the same; and the officers of this Department pay for store-rent and storage necessary for keeping such supplies.

By section 1133 it is further made the duty of the officers of the Quartermaster's Department, under the direction of the Secretary of War, to purchase and distribute to the Army all military stores and supplies requisite for its use which other corps are not directed by law to provide, to furnish means of transportation for the Army, its military stores and supplies, and to provide for and pay all incidental expenses of the military service which other corps are not directed to provide for and pay.

Section 1139 provides that the Quartermaster-General, under the direction of the Secretary of War, shall prescribe and enforce a system of accountability for all quartermaster's supplies furnished to the Army, or to officers, seamen, and marines.

Again, by section 2 of the act of Congress approved July 4, 1864, it is made the duty of the Quartermaster-General to investigate and ad-

just all claims of loyal citizens in States not in rebellion, in words as follows:

And be it further enacted, That all claims of loyal citizens in States not in rebellion for quartermaster's stores actually furnished to the Army of the United States, and receipted for by the proper officer receiving the same, or which may have been taken by such officers without giving such receipt, may be submitted to the Quartermaster-General of the United States, accompanied with such proof as each claimant can present of the facts in his case; and it shall be the duty of the Quartermaster-General to cause such claim to be examined, and, if convinced that it is just, and of the loyalty of the claimant, and that the stores have been actually received or taken for the use of and used by said Army, then to report each case to the Third Auditor of the Treasury, with a recommendation for settlement.

By acts approved June 18, 1866, and July 28, 1866, the provisions of this act were extended to include the counties of Berkeley and Jefferson, West Virginia, and the loyal citizens of the State of Tennessee.

It is provided by acts of Congress and the regulations founded thereon that the Quartermaster's Department shall secure grounds for national cemeteries, to preserve from desecration the graves of all soldiers who fell in battle, died of disease in the field or hospital in the rebellion; to secure suitable burial places in a national cemetery, free of cost, for all honorably discharged soldiers, sailors, or marines who served during the late war, either in the regular or volunteer forces, dying subsequent to the passage of this act (approved March 3, 1873).

Provision is also made by law for the Quartermaster's Department to furnish suitable head-stones to mark the graves of all soldiers, sailors, or marines who served during the late war whose burial is provided for as above, or who may have been buried in private cemeteries.

By act approved August 4, 1886, further provision is made for continuing the work of furnishing head-stones for unmarked graves of Union soldiers, sailors, and marines in national, private, city, town, and village cemeteries, naval cemeteries at navy yards and stations of the United States, and other burial places.

Under these several acts above recited, and others of like import, the Quartermaster's Department provides the means of transportation by land and water for troops and materials of war for the Army. It also, under the law for arming the militia, provides the means of transportation for ordnance and ordnance stores issued by the United States to the several States and Territories. It transports the property for other Executive Departments on proper requisition, payment therefor being made by the respective Departments to the carriers upon accounts forwarded through the Quartermaster-General's Office for that purpose. It provides wagons, ambulances, carts, saddles, and horse equipments (except for the cavalry) and harness (except that used by the artillery).

This Department provides vessels for water transportation, builds wharves, constructs and repairs roads for military purposes, pays tolls, and builds all necessary military bridges. It provides and distributes clothing, tents, and equipage, fuel, forage, stationery, lumber, straw for bedding for men and animals, and all materials for camps and for shelter of troops and stores, furniture for barracks, such as bunks, benches, chairs, tables, and lockers, heating and cooking stoves for use in public barracks and quarters, tools for mechanics and laborers in the Quartermaster's Department, and lights for all military posts and buildings.

It builds barracks, quarters, storehouses and hospitals; provides, by hire or purchase, grounds for military encampments and buildings; .

supplies periodicals and newspapers, or school books in lieu of periodicals, if desired, to the post libraries for the use of enlisted men.

Under provision of act of Congress approved July 5, 1884, the Quartermaster's Department, under the authority of the Secretary of War, contracts for all horses for artillery, cavalry, mounted infantry, and scouts, but in number not to exceed the enlisted men in service required to be mounted.

Under the same act this Department, under the Secretary of War, prepares plans and contracts for the construction of all buildings at military posts.

Under the provisions of section 219, Revised Statutes, "other officers" than "regimental quartermasters," to the average number of 142 have been detailed in the Quartermaster's Department, in doing its duties in various ways in the care and "distribution of the stores of the Quartermaster's Department, under the Secretary of War and his regulations."

INSPECTION BRANCH.

The inspection branch is in charge of Lieut. Col. J. G. Chandler, deputy quartermaster-general, U. S. Army.

This branch of the office conducts the correspondence and keeps the records relating to the assignment to duty of officers of the Quartermaster's Department and of the officers doing duty therein: also the correspondence relating to them individually, as well as to all clerks, agents, and other employes of the Department; it briefs, enters, examines, and acts upon the annual reports rendered by officers of the Department; receives, enters, and files the personal reports pertaining to the stations and duties of the officers of the Department, and of acting assistant quartermasters; keeps the station book, and prepares the roster of officers of the Quartermaster's Department, issued monthly, and also prepares the monthly returns of officers for the Adjutant-General's Office, as required under paragraph 722, Army Regulations.

It receives and distributes orders, circulars, books, pamphlets, etc., necessary to enable officers of the Quartermaster's Department to discharge their duties.

One hundred and forty thousand one hundred and seventy-three orders, &c., were received during the year, and one hundred and eleven thousand six hundred and ninety-two distributed.

It also keeps a book of decisions affecting the Quartermaster's Department, and also a historical register of all clerks, messengers, and others employed in the office of the Quartermaster-General, with record of time lost, and prepares the semimonthly and monthly pay-rolls of all such employes.

The report of this branch shows the existing organization of the Quartermaster's Department in detail and the duties upon which the officers have been engaged during the past fiscal year.

This branch also receives all applications for appointment to the position of post quartermaster-sergeant, United States Army, as provided by act of Congress, approved July 5, 1884, and conducts all correspondence relating thereto.

Since the last annual report (June 30, 1885), several vacancies have occurred among the post quartermaster-sergeants, by reason of death, &c. These vacancies have been filled, and other appointments made in accordance with the provisions of General Order No. 89, A. G. O., 1884, and No. 2, A. G. O., 1885, so that the number (80) as authorized by law are now in the service.

The post quartermaster-sergeants have been assigned to duty in the several military departments where their services appeared to be most needed, and from reports received at this office their services have been satisfactory and valuable to the Department.

BARRACKS AND QUARTERS.

This branch is in charge of Lieut. Col. J. G. Ohandler, deputy quartermaster-general, U. S. A.

During the year the construction of one hundred and ten new buildings at military posts was authorized. These buildings consisted of barracks, officers' quarters, stables, store-houses, guard-houses, shops, &c., and were erected in the States of Nebraska, Texas, California, Louisiana, Michigan, New York, Maine, Maryland, Virginia, Arkansas, Alabama, and in the Territories of Wyoming, Idaho, Utah, Dakota, Indian, Colorado, Washington, and Arizona, at an estimated cost of \$211,120.

The cost of repairs made at the various posts, including labor, tools, and materials, was \$199,096.

For repairs and improvements at recruiting depots, general depots of Quartermaster's Department, and independent stations, there was authorized \$85,934.

From the appropriation of Congress of \$200,000, act approved July 7, 1884, the Secretary of War, on August 7, 1884, granted \$100,000 for the rebuilding of Fort D. A. Russell, Wyoming.

Congress further provided in the sundry civil bill, approved March 3, 1885, \$165,000 for the construction of buildings and the enlargement of such military posts as in the judgment of the Secretary of War may be necessary, \$15,000 of which sum may be used for the purchase of a site near Atlanta, Ga.

This made the sum of \$265,000 available for this fiscal year, from which the Secretary of War made the following distribution:

For San Antonio Barracks.....	\$75,000
For Fort Riley.....	30,000
For Fort Niobrara.....	30,000
For Fort Niagara.....	20,000
For Presidio Barracks.....	20,000
For Atlanta.....	75,000
For Atlanta, land.....	15,000
Total.....	<hr/> 265,000

The Department of Justice having rendered a favorable opinion regarding title to site for new post at Atlanta, Ga., the full amount of purchase money (\$15,000), as appropriated by Congress, was paid therefor. The Secretary of War having decided that the buildings to be erected should be of brick, the work thereon is now in progress under contract.

The act of Congress, approved February 2, 1886, provided \$250,000 for the purchase of the old Produce Exchange building and site, New York City, for Army purposes, and the sum of \$200,000 for the alteration and remodeling of the building so as to make it suitable for Government use.

Favorable opinions having been given by the Department of Justice as to title, the full amount of the purchase money was paid and the work on the new building, duly contracted for, is now being pushed forward with vigor under the direction of the depot quartermaster, New York City.

For improving the water supply at military posts ; for drainage, sewer, wharf, bridge, roads, and other improvements the sum of \$104,560 was authorized.

By act of Congress approved March 3, 1885, the sum of \$100,000 was appropriated for construction and repair of hospitals.

The sum of \$99,454 was authorized for this purpose during the year

SITE AT FORT BROWN, TEXAS.

Congress, in sundry civil bill approved March 3, 1875, appropriated \$25,000 for purchase of a site at Fort Brown, Texas, and further by act March 3, 1885, granted \$160,000 to enable the Secretary of War to acquire good and valid title to the reservation and to pay and extinguish all claims, &c., and provides that no part of said \$160,000 shall be paid until a complete title is vested in the United States.

No portion of the money has been expended. It is still in the Treasury, the Department having thus far failed to obtain a good and sufficient title.

PROPERTY TRANSFERRED.

Under act of Congress approved July 31, 1882, to provide additional industrial training schools for Indian youths and authorizing the use of unoccupied military barracks for such purposes, 23 buildings at Fort Lapwai, Indian Territory were so transferred to the Interior Department.

POST CEMETERIES.

The remains of a number of soldiers have been transferred from the various military posts to other cemeteries.

Fence and head-board improvements have been made at Forts Reno, Sill, Boise, and McHenry, and a vault provided at David's Island, New York Harbor for deposit of remains awaiting transit to Cypress Hill Cemetery.

RESERVATIONS.

The President of the United States, on July 30, 1885, modified the limits of Fort Sully; and on December 30, 1885, Fort Reno, Indian Territory, timber reservation was declared by him.

On May 15, 1886, the boundaries at Fort Lowell, Arizona, were enlarged in order to secure a good water supply.

TRANSFERS.

Fort Cameron ; winter pasturage reservation at Fort Cœur d'Alene; Fort Klamath, Oregon ; old powder-house lot at Fort Saint Augustine, Florida, and certain parts of Fort Hays reservation, were transferred to the Interior Department during the fiscal year.

FIRES.

The losses by fire reported during the fiscal year have been as follows Laundresses' quarters at Plattsburg Barracks, New York ; shops at Fort Lewis, Colorado ; tools at West Point, New York ; shops at Fort Elliott, Texas ; officers' quarters at Fort Ellis, Montana ; barracks and stable at Fort Custer, Montana ; barracks at Uncompahgre, Colorado ; stable at Fort Leavenworth, Kansas ; barracks and hospital at Columbus Barracks ; saw-mill &c., at Fort Wingate, New Mexico ; machinery at Fort Apache, Arizona.

DAMAGE BY FLOOD.

By each large rise or flood of the Ohio River the buildings and grounds at Newport Barracks, Kentucky, are partly submerged.

It is therefore recommended that steps be taken toward the purchase of higher land in that vicinity, and that the building of proper quarters for troops thereon be provided for by Congress.

TRANSPORTATION.

This branch is in charge of Lieut. Col. C. G. Sawtelle, deputy quartermaster-general, U. S. A.

The sum of \$2,900,000 was appropriated for transportation of the Army in the act approved March 3, 1885 (24 Stat., 359), making appropriations for the support of the Army for the fiscal year ending June 30, 1886.

Transportation was provided by the Quartermaster's Department during the year by rail, water, wagon, and stage for 236,130 persons (including 200,662 persons transported or ferried by Government vessels), 160,191.63 tons of freight, and 7,907 horses and mules, costing, as reported, \$1,579,453.58, of which \$266,401.38 has been paid for the transportation of persons, and \$975,793.93 for the transportation of live-stock and freight, leaving \$337,258.27 due on outstanding accounts at the close of fiscal year.

In addition to the foregoing, the total cost incurred for tolls, payment of employes, enlisted men on extra duty, purchasing, maintaining and operating vessels, purchase of draft animals, purchase and repair of harness, for water-supply, sewerage, construction and repair of wharves and bridges, &c., amounted to \$1,501,125.58, which makes the entire cost of the service under Army transportation \$3,080,579.16, of which \$458,836.74 remained unpaid at the close of the fiscal year.

MOVEMENT OF TROOPS.

The larger movements of troops were as follows:

Second Cavalry: Two companies from Department of California to Department of Arizona; three companies from Department of Texas to Department of the Missouri.

Sixth Infantry: Headquarters from Department of the Platte to Department of the Missouri.

Eighth Infantry: Seven companies from Department of California to Department of Arizona.

The exchange of stations of the First and Eighth and the Second and Fourth Infantry was deferred by order of the Secretary of War until after the close of the fiscal year, for lack of funds.

RAILWAY SERVICE.

Transportation was supplied by rail by the Department for 28,917 persons, 7,466 animals, and 71,626 tons of material, at a cost (1) by payments out of the appropriation transportation of the Army, \$940,494.40, of which \$212,412.64 is for transportation of persons, \$456,556.20 for transportation of live stock and freight, and \$271,525.56 for payment of outstanding accounts; (2) by credit in the Treasury on account of indebtedness of bonded Pacific railroads, \$488,761.06, of which \$153,830.34 was for transportation of persons, and \$334,930.72 for transportation of

live-stock and freight; (3) by payment of land-grant railroads out of special appropriation for the purpose, the sum of \$125,000.

Total cost to the United States for railroad transportation furnished by the Quartermaster's Department during the year was \$1,554,255.44.

BONDED PACIFIC RAILROADS.

The accounts of the bonded Pacific railroads are adjusted under the following statutes: act March 3, 1873, act May 7, 1878, act March 3, 1879.

Settlements for service on the unsubsidized portions of the Union Pacific Railway, including the Kansas Division (formerly the Kansas Pacific), and the Denver Pacific Railroad and Telegraph Company; the Central Branch Union Pacific Railroad, and the Sioux City and Pacific Railroad, continue to be made the same as during the past fiscal year.

Settlements for services over the unsubsidized portions of the Central Pacific Railroad have heretofore been held subject to the provisions of Treasury circular letter dated January 12, 1884, under which the amounts were certified by the accounting officers and reported to the Secretary of the Treasury, subject to the disposition of Congress.

No action having been taken by Congress in reference to the disposition of the amounts embraced in the settlements held in abeyance, a motion was made by the company before the accounting officers of the Treasury by which, in effect, the revocation of the order of January 12, 1884, and the revival of the enforcement of that of June 27, 1883, was requested.

The Second Comptroller, in a decision thereon, dated August 28, 1885, which was approved by the Secretary of the Treasury, and published in Treasury circular No. 136, dated September 11, 1885, directs the revocation of Department circular No. 83, of June 27, 1883, and circular letter of January 12, 1884, and that all compensation now due or which may hereafter become due the Central Pacific Railroad for services rendered the Government be withheld, and applied, one-half upon interest account and the other half credited to the sinking fund, as required by the act of May 7, 1878; also, that hereafter the accounts of the company be adjusted by the accounting officers, the Secretary of the Treasury retaining the whole amount, applying the same in the manner as provided by that act.

It is understood that, on application of the company, the Secretary of the Treasury consented to suspend action under that part of his order directing the withholdment and application of compensation due or to become due the company, upon the condition that the matter in issue be presented to the proper courts for judicial decision. In conformity thereto a petition of the Central Pacific Railroad against the United States, No. 14,711, was filed in the United States Court of Claims, November 24, 1885, to recover compensation for services performed for the United States in transportation over those portions of the road as above mentioned, in the building of which it had not been aided by the Government, and therefore not embraced in the above-named act.

The United States demurred on the ground that the whole of said compensation is required to be retained under the provisions of the second section of the act, May 7, 1878, chapter 96, Thurman act, 20 Statutes, page 58.

The decision of the court was that the provisions of the act applied only to services over the aided portions of the road, and the demurrer was overruled.

An appeal was taken to the Supreme Court of the United States (October term, 1885), and decision rendered May 10, 1886, sustaining the railroad company in its construction of the second section of act of May 7, 1878, that cash payment for services over the unsubsidized roads should be made by the United States.

The Secretary of the Treasury, in circular of June 4, 1886, invited attention to decision referred to, and directed that thereafter the accounts and claims of the company for such services shall be settled, adjusted, and paid in conformity to such decision, and that all Department circulars heretofore issued upon the subject are modified accordingly.

On the suggestion of the honorable the Secretary of the Treasury, and by direction of the honorable the Secretary of War, the Quartermaster-General, on June 7, 1886, submitted the estimates of appropriations required to execute the decision of the Supreme Court, aggregating \$906,314.42. (See House Ex. Doc. 270, Forty-ninth Congress, first session.)

The appropriation was, however, refused by Congress. (See House Report No. 3109, Forty-ninth Congress, first session.)

In view of the circumstances here reported, and the fact that the estimates upon which the regular appropriations of the Quartermaster's Department entitled "Transportation of the Army" were based, carefully excluded any provision for payment of money to the bonded Pacific railroads, for the reason that the laws as interpreted by the accounting officers of the Treasury and the Department of Justice, at the time of the preparation of the estimates, prohibited any payment to these companies, it is thought that the Army transportation appropriation should not be used in payment of any accounts of these companies, but that a special appropriation from Congress for the purpose should be secured.

As a matter of fact, the appropriation for transportation of the Army will be hardly sufficient to meet the usual demands of the service, as contemplated in the preparation of the estimates of the amount needed for the purpose.

INDEBTED RAILROADS.

There are four railroads indebted to the United States for railway material purchased under executive order at the close of the war, viz, the Edgefield and Kentucky, the McMinnville and Manchester, the Mobile and Ohio, and the Memphis, Clarksville and Louisville Railroads.

As stated in my last annual report, these roads are apparently delinquent in the settlement of their indebtedness, and some action by Congress appears to be necessary to either relieve the debtors or provide some method of procedure for the collection of the same.

WATER TRANSPORTATION.

During the fiscal year there were moved by water transportation 2,210 persons, 345 animals, and 18,864,350 pounds of material, not including 200,662 persons and 10,892,887 pounds of freight transported or ferried on United States vessels controlled or operated by the Quartermaster's Department. The aggregate cost of this service was \$159,369.26.

The total cost of repairing, running, and maintaining the vessels owned by this Department, including the wages of the crews during the fiscal year, as reported to this office, is \$85,206.64, less than last year by \$24,004.68.

According to reports received from officers of the Quartermaster's Department there have been 19 vessels of different kinds employed at various times during the year at an expense of \$29,502.05.

WAGON TRANSPORTATION.

By wagon carriage the Department transported, as reported, 147,364,736 pounds of military supplies during the year at a cost to the appropriation "Transportation of the Army" of \$496,930.47. The sum of \$49,528.79 was still due on outstanding accounts June 30, 1886. Eighty-one contracts for wagon transportation were filed during the year.

STAGE TRANSPORTATION.

Four thousand three hundred and ninety-one persons and 9,180 pounds of stores and extra baggage were transported by stage during the year, at a cost of \$51,461.24. Of this sum, \$6,722.81 was due on outstanding accounts June 30, 1886.

The Department has been constrained during the year to make unusual and extraordinary expenditures from the appropriation, among which the following are mentioned:

The increased transportation expenses in the Department of Arizona and the District of New Mexico, owing to Indian troubles in that section, an excess of \$118,285.60 over the preceding fiscal year; the large amounts paid for transportation of horses and for the purchase and transportation of mules caused by the Indian troubles; the replacement of stock worn out in the Oklahoma operations and other movements on the border during the preceding fiscal year; and the necessary construction of a steam-propeller for service in San Francisco Harbor, to take the place of the worn-out steamer General McPherson, which has been in service twenty years.

The strictest economy in transportation expenditures has been enjoined and required of all officers of the Department during the year, to the extent of denying many seeming necessities of the service and deferring desirable movements of troops.

Of the \$125,000 appropriated for payment from Army transportation over certain land-grant railroads during the fiscal year, the sum of \$48,395.54 was paid out on settlements of the accounting officers of the Treasury, leaving a balance of \$76,604.46 to pay outstanding claims. The additional sum of \$63,942.50 was also paid from similar appropriations of previous fiscal years, making a total of \$112,338.04 paid for such services during the fiscal year.

TRANSPORTATION ACCOUNTS AND CLAIMS.

Three thousand one hundred and eighty transportation accounts and claims, amounting to \$1,163,786.27, received action during the year; of these, 3,148, amounting to \$1,154,173.72, were referred to the proper bureau or office for settlement; sixteen, amounting to \$3,206.26, were unfavorably reported upon and rejection recommended; and sixteen, amounting to \$6,409.29, were suspended for additional evidence. Fifty-two, amounting to \$7,167.72, were, at the close of the year, awaiting action.

*REGULAR AND MISCELLANEOUS SUPPLIES.***ANIMALS.**

Twelve hundred and fifty-one cavalry and artillery horses were procured by purchase during the fiscal year, costing \$176,667.65, an average cost of \$141.24 per head.

For the Army trains and special service 18 draught-horses were purchased at an average cost of \$205.85 per head, and 563 mules at an average cost of \$154.99 per head.

The sale of 780 cavalry and artillery horses, 28 draught-horses, and 329 mules is reported for the sum of \$51,006.82, all of which was deposited in the Treasury to the credit of miscellaneous receipts, excepting such small sums as were received for sales to officers.

There were 227 cavalry and artillery horses, 8 team-horses, and 300 mules lost, stolen, and died during the fiscal year, leaving on hand on the 30th June, 1886, 8,609 cavalry and artillery horses, 454 team-horses, 5,493 mules, and 6 oxen.

WAGONS AND AMBULANCES.

During the fiscal year there were purchased 100 six-mule army wagons at a cost of \$7,500, and 9 bodies for two or four horse or mule wagons at a cost of \$168.75.

VETERINARY SUPPLIES.

During the fiscal year veterinary supplies were purchased from the Medical Department to the value of \$2,266.95, against the cost of \$13,332.28 for similar supplies for the fiscal year 1884-'85, and \$9,072.28 for the fiscal year 1883-'84.

This saving has been effected by the operation of General Orders No. 64, A. G. O., 1884, which greatly reduced the number and quality of veterinary supplies for Army uses. This revised list has been found to be sufficient to meet the needs of the service.

ILLUMINATING SUPPLIES.

During the fiscal year there were purchased 417 pendant lamps, 802 bracket lamps, 51 street lamps, 1,853 lanterns (oil and candle combined), and the necessary chimneys, wicks, and various extra parts, at a cost of \$13,925.33.

Seven hundred and sixty gallons of gasoline were purchased at a cost of \$497.20, and also 319,990 gallons of mineral oil, in 5-gallon cans, at a cost of \$49,470.51, making the aggregate expenditure on account of illuminating supplies \$63,893.04, less than the cost last year by \$5,723.91.

MISCELLANEOUS CLAIMS AND ACCOUNTS.

One thousand five hundred and fifty-two miscellaneous claims and accounts, amounting to \$532,160.85, received action during the year, and 10,669 claims and 249 accounts, amounting in the aggregate to \$8,516,715.59, remain on file awaiting action.

CLAIMS UNDER ACT OF JULY 4, 1864.

This branch is in charge of Lieut. Col. B. C. Card, deputy quartermaster-general, U. S. A.

The work on these claims was continued throughout the past fiscal year, but as the work in the field nears completion the investigation becomes more difficult. Good progress has however, been made, and it is now believed that with the force provided the investigations of these claims in the field can be completed by the end of the current fiscal year.

There were investigated and reported upon by agents during the past fiscal year 2,906 claims, calling for \$1,816,751.02.

Final action was taken on 3,767 claims, amounting to \$1,155,816.36, 1,316 of which the sum of \$235,243.32 was allowed, and \$403,382.32 disallowed, and 2,451 entirely rejected, amounting to \$517,190.72.

Also, in compliance with acts of January 20, 1885, and February 13, 1885, respectively, two claims of a special character, in favor of Elizabeth Corson and Ayers P. Merrill, deceased, and amounting to \$103,998.45, were investigated and reports made thereon for the consideration of Congress.

The following statement shows the number and amount of claims presented under act of July 4, 1864, and action taken thereon :

Number of claims presented to June 30, 1886.....	57,821
Number of claims allowed to June 30, 1886	18,329
Number of claims disallowed to June 30, 1886.....	34,500
	<hr/>
	52,838
Number on hand July 1, 1886	4,983
	<hr/>
Amount of 57,821 claims presented.....	\$39,811,836 99
Amount of 52,838 claims acted upon.....	35,195,309 04
	<hr/>
Claims remaining on hand (4,983).....	4,616,577 95

CLOTHING AND EQUIPAGE SUPPLIES.

This branch is in charge of Capt. John F Rodgers, military storekeeper, U. S. A.

All the clothing and equipage for the Army are procured through this branch of the office.

The clothing and equipage are contracted for or manufactured at the general depots of this Department at Philadelphia, Jeffersonville, and San Francisco. The boots and shoes are manufactured at the Military Prison at Fort Leavenworth, Kansas.

The amount appropriated by Congress was \$1,250,000. Credits amounting to \$73,982.69 were added on account of sales to officers and on account of clothing overdrawn by enlisted men ; \$1,323,664.23 were remitted to officers of the Department during the fiscal year to defray duly authorized expenditures, leaving a balance of \$318.46 in the Treasury, which together with such amounts as may still be placed to the credit of the appropriation will all ultimately remain in the Treasury, as the outstanding obligations are few, involving only small sums.

During the fiscal year \$63,398.85 were realized at the general depots at Philadelphia, Pa.; Jeffersonville, Ind.; Saint Louis, Mo., and San Francisco, Cal., and at the Military Prison at Fort Leavenworth, Kansas, from sales of old pattern and unserviceable clothing and equipage, materials, cuttings, &c., which amount, as required by law, has been covered into the Treasury, credited to "Miscellaneous receipts."

The principal issues from the general depots during the year were 6,602 helmets, 6,806 cork helmets, 43,299 forage caps, 12,194 fur and canvas caps, 20,818 campaign hats, 8,668 overcoats, 1,076 fur and blank-

et-lined overcoats, 11,477 uniform dress coats, 45,417 blouses, 24,036 canvas fatigue coats, 3,698 stable frocks, 3,227 pairs overalls, 70,278 pairs trousers (kersey), 24,304 pairs trousers (canvas fatigue), 1,386 pairs trousers (linen), 12,507 pairs suspenders, 44,497 flannel shirts, 62,508 knit undershirts, 75,114 pairs drawers, 150,053 pairs woolen stockings, 142,673 pairs cotton stockings, 26,102 pairs boots (all kinds), 80,477 pairs shoes (all kinds), 154,969 pairs Berlin gloves, 12,514 pairs woolen mittens, 1,771 pairs fur mittens and gauntlets, 11,947 pairs canvas mittens, 13,293 pairs leather gauntlets, 6,570 pairs Arctic overshoes, 16,017 woolen blankets, 24,745 pairs gold lace chevrons, 10,018 pairs cloth chevrons, 10,034 barrack bags, 14,320 wire woven bunk-bottoms, 17,704 mattresses, 36,618 mattress covers, 18,252 pillows, 33,636 pillow-cases, 71,001 bed-sheets, 4,515 mosquito-bars, 6,031 axes, 1,923 shovels, 3,074 tents (miscellaneous), 11,272 tents (shelter), 15,589 scrubbing-brushes, 28,945 corn brooms, 3,380 barrack chairs.

The principal manufactures were 12,033 canvas caps, 5,951 overcoats, 803 overcoats (blanket-lined), 4,979 uniform dress coats, 39,046 blouses, 14,997 canvas fatigue coats, 2,281 stable frocks, 4,010 pairs overalls, 61,423 pairs trousers, 13,904 pairs canvas fatigue trousers, 21,958 dark blue flannel shirts, 92,067 pairs drawers, 11,925 pairs canvas mittens, 29,727 pairs gold lace chevrons, 12,179 pairs cloth chevrons, 12,633 barrack bags, 24,624 mattress covers, 2,826 tents (all kinds).

The following boots and shoes were manufactured at the Military Prison at Fort Leavenworth, Kansas, during the fiscal year: 6,997 pairs boots, brass-screwed, old pattern; 2,143 pairs cavalry boots, brass-screwed; 12,604 pairs cavalry boots, sewed; 12 pairs shoes, brass-screwed, old pattern; 1 pair post shoes, brass-screwed; 26,778 pairs post shoes, sewed; 93 pairs field shoes, sewed; 30,981 pairs campaign shoes, sewed; 5,221 pairs campaign shoes, brass-screwed; 3,000 barrack chairs; 27,258 corn brooms.

The supplies procured appear to have given satisfaction, and have been up to the existing standards and specifications. A full compliance therewith is insisted upon, with favorable results. But few complaints have been received during the year in regard to the clothing issued.

Reports from the Army represent the enlisted men as contented and satisfied, the quality of the clothing being good and the allowance provided ample.

The pattern of boots and shoes not having given entire satisfaction a further effort has been made to improve the foot gear of the enlisted men. Lasts, known to the trade as the "Waukenphast," have been procured, and all boots and shoes are now made upon them, and it is thought will prove satisfactory as they shall have been fully introduced.

NATIONAL CEMETERIES.

In charge of Lieut. Col. R. N. Batchelder, deputy quartermaster-general, U. S. A.

There were 82 national cemeteries at the close of the last fiscal year, and the number remains the same.

Four superintendents were appointed during the year and 2 discharged, leaving 73, the number allowed by law, in service June 30, 1886.

The work under contracts of S. G. Bridges and D. W. Whitney, for furnishing headstones for soldiers' graves in private, village, and city cemeteries, has been closed, and final accounts therewith submitted to the Treasury for settlement.

The appropriation for this work having been exhausted, and, as no new appropriation was made therefor, the Department has been unable to supply those headstones for which applications were received during the year. In the appropriation for the present year, however, provision is made for continuing the supply of these stones, and proposals have been invited for furnishing such as may be required to June 30, 1887.

Of the appropriation for construction of a macadamized road to the Springfield, Mo., National Cemetery there is an unexpended balance of about \$4,000, which will be applied in adding covering of gravel and in repairs made necessary by damage to the work by flood.

At the last session of Congress provision was made for the construction of roadways to the Chalmette, Knoxville, and Natchez National Cemeteries, and steps are now being taken preliminary to making contracts for the work. Exclusive of these three there are now six of these roads which have been constructed by special authority of Congress, but as no appropriation has been made for their maintenance, some of them have been greatly injured, and, in some instances, rendered almost useless for want of occasional repairs.

The case of the Vicksburg Cemetery roadway may be cited as an instance where a few hundred dollars expended from time to time when needed would have preserved the road and kept it in good order, but it will now require a special appropriation of \$10,000 to restore the work.

An item has accordingly been included in the estimates for the ensuing fiscal year to provide for the maintenance and repair of these roads, and the subject is here brought to the attention of the Secretary of War in the hope that, as a measure of economy, he will commend it to the attention of Congress.

The work of improvements at the San Francisco National Cemetery has been continued during the year.

At the Cypress Hill Cemetery the inclosing wall on west and north sides has been completed and a macadamized avenue constructed extending from entrance through the entire grounds.

Many necessary improvements have been made at cemeteries not mentioned herein, which are fully set forth in the report of the officer specially in charge of affairs relating to national cemeteries, and in the detailed statement herewith submitted, showing the expenditures on account of each cemetery.

With the appropriation of \$4,000 for a monument at Baxter Springs, Kansas, a handsome structure, with statue of a soldier, has been erected.

There has been a manifest improvement during the past year in the working of the personal force of this office, but many changes are still necessary in order to make the office entirely efficient, especially in the administrative examination of officers' accounts under the system of accountability established by section 1139 Revised Statutes. Any system of accountability which may be devised will fail unless the examination of officers' accounts under it, can be promptly made and the result reached without delay. Such result is necessary for the safety of the officer himself, as timely advice enables him to correct his accounts by securing the necessary evidence, while it is practicable; irregularities can be speedily corrected and new decisions, rulings, and instructions can be made operative and efficient.

To reach the highest efficiency as thus indicated, there are needed a larger number of clerks, competent to examine and pass upon officers' accounts as they are rendered. The office is weak in this special feature, having a large number of very worthy clerks and copyists who are not

fitted for this higher class of work. The complicated and difficult accounts, connected with land-grant railways, make a large draft upon the best talent of the office, with the necessary result of diminishing the number of those available to examine and analyze accounts. The work of examining claims is gradually drawing to a close; it is hoped that some of the most valuable clerks employed upon them may be retained for the current work of the office, as already indicated.

It is my duty, as it is a pleasure, to testify to the patient industry and good services generally rendered by all the employes of this office, with a few marked exceptions of those hindered by physical infirmity or failing mental and moral vigor. The shortcomings of even one person invariably adds a greater burden to the competent, the ready, and the willing, and so, more or less, impairs the efficiency of the others.

It is gratifying to hear from all parts of the military service that the officers of the Quartermaster's Department and those doing duty therein were never more zealous or efficient than at the present time, and to them and to those with whom I am brought more immediately in contact are due my grateful acknowledgments for most valuable assistance and support.

S. B. HOLABIRD,
Quartermaster-General, U. S. Army.

Hon. WM. C. ENDICOTT,
Secretary of War.

REPORT OF THE COMMISSARY-GENERAL OF SUBSISTENCE.

WAR DEPARTMENT,
OFFICE COMMISSARY-GENERAL OF SUBSISTENCE,
Washington, D. C., October 1, 1886.

SIR: I have the honor to submit the following report of the operations of the Subsistence Department for the fiscal year ending June 30, 1886.

RESOURCES AND EXPENDITURES.

The following statement exhibits the aggregate fiscal resources and expenditures of the department for the year mentioned, and the balances at the close of the fiscal year:

RESOURCES.

Amounts in the Treasury to the credit of appropriations of the Subsistence Department on June 30, 1885, as follows:

Subsistence of the Army, 1832 and prior years	\$21 00
Subsistence of the Army, 1834	469,894 76
Subsistence of the Army, 1835	13,525 59
Signal Service subsistence, 1884	890 69
Signal Service subsistence, 1885	7,463 18
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act July 5, 1884	269 69

492,064 91

Amounts to the credit of officers of the Subsistence Department, and of officers doing duty in the Subsistence Department, with the Treasurer, assistant treasurers, and designated depositaries, and in their personal possession, on June 30, 1885, as follows:

Subsistence of the Army, 1833 and prior years	\$3,007 70
Subsistence of the Army, 1884	2,001 06
Subsistence of the Army, 1885	462,924 03
Signal Service subsistence, 1884	12,096 25
Signal Service subsistence, 1885	9,241 00

489,270 04

Amounts refunded to the Treasury near close of fiscal year 1885, but not carried to the credit of the appropriations by June 30, 1885, since covered in as follows:

Subsistence of the Army, 1883 and prior years.....	\$12 64
Subsistence of the Army, 1884	14 36
Subsistence of the Army, 1885	142 33

\$169

Amounts appropriated for the Subsistence Department for the fiscal year ending June 30, 1886, as follows:

Subsistence of the Army, 1886, act of March 3, 1885..	\$1,800,000 00
Signal Service subsistence, 1886, act of March 3, 1885.	155,000 00
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per private act No. 5, approved February 20, 1886, being portion for commissary supplies.....	11 90
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act May 17, 1886, being portion for commissary supplies	9,116 77

1,964,128

Amounts collected from various sources and refunded to the appropriations of the Subsistence Department on the books of the Treasury during the fiscal year 1886, as follows:

Subsistence of the Army, 1883 and prior years.....	\$808 85
Subsistence of the Army, 1883 and prior years, transfer account	2,586 19
Subsistence of the Army, 1884.....	185 69
Subsistence of the Army, 1884, transfer account.....	107 74
Subsistence of the Army, 1885.....	3,392 59
Subsistence of the Army, 1886	7,902 63

14,963

Amounts collected from various sources during the fiscal year 1886, in process of cover into the appropriations of the Subsistence Department on June 30, 1886, as follows:

Subsistence of the Army, 1884 and prior years.....	\$1,000 90
Subsistence of the Army, 1885.....	36 73

1,037

Amounts received by officers of the Subsistence Department and by officers doing duty in the Subsistence Department from sales of subsistence stores to the following purchasers during the fiscal year 1886, and taken up for immediate disbursement under the following appropriations:

Subsistence of the Army, 1885:	
Sales to officers and enlisted men not previously reported.....	\$137 46
Subsistence of the Army, 1886:	
Sales to officers, \$367,965.89; to enlisted men and to companies, detachments, and hospitals, \$401,751.40; to civil employes, \$11,238.80; to Fort Leavenworth Military Prison, \$23,914.60; to U. S. Geological Survey, \$1,151.95; to United States surveyors, \$171.97; to Headquarters of the Army, \$7.29; to Indian agents, \$845.48; to physician to Indians, \$240.50; to Quartermaster's Department, \$271.91; to Smithsonian Institution, \$34.80; of condemned stores and property at auction, \$3,241.57; of boxes, barrels, &c., \$345.19; of garden seeds and agricultural implements, \$66.94; total.....	811,248 29

811,385

Amounts taken up by officers doing duty in the Subsistence Department on account of reclamations for stores lost, damaged, &c., and in correction of errors in their accounts, &c., during the fiscal year 1886:

Subsistence of the Army, 1885	\$366 08
Subsistence of the Army, 1886	663 00

1,029

Amounts in hands of representatives of deceased officers to be collected:

Subsistence of the Army, 1878	\$109 84
Subsistence of the Army, 1882	248 63
Subsistence of the Army, 1883	117 99

477

Amount transferred on books of the Treasury in settlement of deceased officers' accountability during the fiscal year 1886:

Subsistence of the Army, 1883 and prior years, transfer account ..	\$1,116 24
Amount charged against deceased, resigned, and dismissed officers, on account of funds alleged to have been lost by theft, &c., as follows:	
Subsistence of the Army, 1879 and prior years	3,000 89
Amounts charged against officers still in service on account of funds alleged to have been lost by theft, &c., and for which relief can only be obtained in the Court of Claims, under sections 1059 and 1062, Revised Statutes, as follows:	
Subsistence of the Army, 1879 and prior years	\$949 71
Subsistence of the Army, 1880	393 96
Subsistence of the Army, 1881 and prior years	3,720 65
Subsistence of the Army, 1882	39 18
Subsistence of the Army, 1883	109 16
	<hr/>
	5,212 66
Amount charged against officers still in service, taken up during the fiscal year, as follows:	
Subsistence of the Army, 1885	56 26
Total resources	<hr/> <hr/> 3,783,931 60

EXPENDITURES.

Amounts expended on the books of the Treasury from the appropriations of the Subsistence Department, during the fiscal year 1886, as follows:

Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act July 5, 1884	\$269 69	
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act February 20, 1886	11 90	
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act May 17, 1886	9,116 77	
Signal Service subsistence, 1884	1,906 00	
Signal Service subsistence, 1885	707 23	
Signal Service subsistence, 1886	1,655 62	
Subsistence of the Army, 1882 and prior years	21 00	
Subsistence of the Army, 1883 and prior years, transfer account	568 94	
Subsistence of the Army, 1884	265 74	
Subsistence of the Army, 1885	318 19	
Subsistence of the Army, 1886	540 30	
	<hr/>	\$15,381 38
Amounts disbursed by officers of the Subsistence Department, and officers doing duty in the Subsistence Department, during the fiscal year 1886, as follows:		
Subsistence of the Army, 1884	\$20 00	
Subsistence of the Army, 1885	437,731 03	
Subsistence of the Army, 1886	2,094,165 75	
Signal Service subsistence, 1885	8,653 75	
Signal Service subsistence, 1886	128,526 95	
	<hr/>	2,669,097 48
Amounts dropped by officers doing duty in the Subsistence Department in correction of errors in their accounts during the fiscal year 1886:		
Subsistence of the Army, 1885	\$1 75	
Subsistence of the Army, 1886	207 99	
	<hr/>	209 74
Amounts transferred on books of Treasury, act March 3, 1875 (18 Stat. L., 418):		
Subsistence of the Army, 1883 and prior years, transfer account	\$3,133 49	
Subsistence of the Army, 1884 and prior years, transfer account	107 74	
	<hr/>	3,241 23
Amounts carried to the surplus fund on June 30, 1886:		
Subsistence of the Army, 1883 and prior years	\$3,829 19	
Subsistence of the Army, 1884	471,810 13	
Signal Service subsistence, 1884	11,080 94	
	<hr/>	486,720 26
Total expenditures		<hr/> <hr/> 3,174,650 09

BALANCES.

Amounts in the Treasury to the credit of appropriations of the Subsistence Department on June 30, 1886, as follows :

Subsistence of the Army, 1885.....	\$37,454 89
Signal Service subsistence, 1885	7,343 20
Subsistence of the Army, 1886.....	142,342 24
Signal Service subsistence, 1886	12,344 38

\$199,484 71

Amounts to the credit of officers of the Subsistence Department, and of officers doing duty in the Subsistence Department, with the Treasurer, assistant treasurers, and designated depositaries, and in their personal possession, on June 30, 1886, as follows:

Subsistence of the Army, 1885.....	\$5,038 47
Subsistence of the Army, 1886.....	348,812 84
Signal Service subsistence, 1886.....	12,473 05

366,324 36

Amounts refunded to the Treasury near the close of fiscal year, but not carried to the credit of the appropriations by June 30, 1886:

Subsistence of the Army, 1884 and prior years.....	\$1,000 90
Subsistence of the Army, 1885.....	36 73
Subsistence of the Army, 1886.....	33,744 80

34,782 43

Amounts in hands of representatives of deceased officers to be collected:

Subsistence of the Army, 1878.....	\$109 84
Subsistence of the Army, 1882	248 63
Subsistence of the Army, 1883.....	117 99

476 46

Amount charged against officers (deceased and resigned) on account of funds alleged to have been lost by theft, &c., as follows:

Subsistence of the Army, 1879 and prior years.....	
--	--

3,000 00

Amounts charged against officers still in service on account of funds alleged to have been lost by theft, &c., and for which relief can only be obtained in the Court of Claims, under sections 1059 and 1062, Revised Statutes, as follows:

Subsistence of the Army, 1879 and prior years.....	\$949 71
Subsistence of the Army, 1880	393 96
Subsistence of the Army, 1881	3,720 65
Subsistence of the Army, 1882	39 18
Subsistence of the Army, 1883	109 16

5,212 66

Total balances.....609,281 51

Statement of the average contract prices per pound (independent of quantities purchased) in each State and Territory for the fresh beef supply of the Army, in the fiscal year 1886 and 1887.

State or Territory.	Average price per pound.		State or Territory.	Average price per pound.	
	1886.	1887.		1886.	1887.
	Cents.	Cents.		Cents.	Cents.
Maine.....	11.66	9.75	Florida.....	6.75	12.47
Massachusetts.....	10.65	9.63	Alabama.....	10.50	.....
Rhode Island.....	10.50	11.75	Louisiana.....	13.50	8.00
Connecticut.....	8.50	9.00	Arkansas.....	8.00	8.00
New York.....	9.54	9.86	Texas.....	7.16	6.71
Pennsylvania.....	11.75	10.72	Kentucky.....	11.50	7.00
Maryland.....	9.99	6.75	Ohio.....	7.25	5.45
District of Columbia.....	5.99	7.42	Indiana.....	9.40	8.00
Virginia.....	6.83	5.16	Colorado.....	10.06	9.11
Illinois.....	8.50	7.75	Utah.....	6.70	6.24
Michigan.....	8.77	12.37	Montana.....	9.67	8.49
Missouri.....	6.99	6.48	California.....	6.65	6.77
Minnesota.....	6.00	5.44	Arizona.....	10.41	9.67
Nebraska.....	8.00	7.31	Washington Ter'y.....	7.90	7.33
Kansas.....	7.47	7.14	Idaho.....	7.79	7.00
Indian Territory.....	8.52	8.15	Nevada.....	18.50	15.00
Wyoming.....	9.11	8.86	Oregon.....	8.45	7.60
Dakota.....	8.87	8.72			
New Mexico.....	8.82	7.34			
Georgia.....	12.00	7.40			
			Average price.....	9.15	8.26

During the fiscal year ended June 30, 1886, 271 newspaper advertisements and 479 circulars and posters inviting proposals for subsistence supplies were reported to this office. There were also reported 8,486 contracts of various kinds for fresh meats, complete rations, and other supplies required for the subsistence of the Army.

ISSUES TO INDIANS.

Subsistence supplies were issued, or transferred to the Interior Department for issue, to Indians during the fiscal year ended June 30, 1886, to the following amounts in value:

To W. H. H. Llewellyn, Indian agent at Mescalero Agency, N. Mex.....	\$599 14
To Sioux Indians <i>en route</i> from Cheyenne Agency to and attending United States court at Deadwood, Dak.....	194 89
To destitute Hualpai Indians at Hackberry, Ariz.....	5,001 22
To destitute Indians near Fort Bidwell, Cal.....	508 95
To families of Indian scouts at Fort Supply, Ind. T.....	1,351 81
To Quinn River Pi-Ute Indians at Fort McDermitt, Nev.....	2,980 66
To British Cree Indians at Fort Assinniboine, Mont.....	934 33
To Nez Percé Indians, prisoners of war, at Fort Spokane, Wash.....	1,619 26
To Chiricahua Indians, prisoners of war, at Fort Apache, Fort Bowie, and in the field, Arizona, and at Saint Augustine, Fla.....	23,969 20
To Chiricahua and White Mountain Indians, prisoners of war, at Fort Apache, Ariz.....	653 72
To Chiricahua and Warm Spring Indians, prisoners of war, at San Carlos, Ariz.....	1,983 35
To Indian prisoners of various tribes and at different posts.....	390 70
To Indians visiting posts under Army Regulations 2182 and 2183.....	602 87
To destitute Indians of various tribes and at different posts.....	38 46
Total.....	40,828 65

The sum of \$10,636.67 of the above amount has been transferred by the Interior Department to the credit of the appropriation for Army subsistence.

MISCELLANEOUS ISSUES AND EXPENDITURES.

Issues were made during the fiscal year ended June 30, 1886, under orders from commanding officers, as follows:

	Rations.
To citizen prisoners.....	153
To destitute citizens.....	786
To marines (deserters) in November, 1885, at Fort Sidney, Nebr., and in March, 1886, at Fort Thomas, Ariz.....	39
To 14 prisoners of state (Mexican mutineers), in July to December, 1885, both months inclusive, at camp at Yuma, Ariz.....	2,422

The disbursements for liquid coffee for enlisted men traveling by cars, stages, &c., amount to \$5,504.86, being a decrease from previous year of \$1,278.20.

For extra-duty pay of enlisted men detailed for duty in the subsistence department at posts there was expended \$21,140.79, being an increase over the previous year of \$185.39.

There was disbursed for advertising during the year the sum of \$11,073.02, an increase of \$3,436.68 over the previous fiscal year.

LOSSES OF STORES AND PROPERTY.

The value of stores reported lost in the fiscal year 1886, by accident, wastage in transportation, and while in store, &c., for which no one has

been held accountable, was \$4,714.68, being \$1,535.80 less than losses from like causes in the previous fiscal year.

Stores lost during fiscal year in transportation and responsibility fixed	
amounted to	\$596 96
Of this amount there has been collected and accounted for	218 65
Balance to be collected.....	307 61

Value of supplies lost by theft, &c., during the fiscal year ended June 30, 1886.

Where reported.	Cause of loss, per report.	When reported.	Value.
Fort Huachuca, Ariz.....	Destroyed or carried off by Indians in Guadalupe Cañon, Ariz.	July, 1885.....	\$55 38
Do	Captured and burned by Indians in Guadalupe Cañon, Ariz.	August, 1885.....	29 39
In the field, in Arizona and Mexico.	Lost while in pursuit of hostile Indians ..	October, 1885	77 48
Fort Assinniboine, Mont....	By theft while in transit.....	do	98 45
Fort Gibson, Ind. T	By theft	do	23 39
Fort D. A. Russell, Wyo.....	do	November, 1885..	2,898 37
Fort Bowie, Ariz.....	By flood in Guadalupe Cañon, Ariz.....	December, 1885 ..	195 31
Camp Rice, Tex.....	By theft	January, 1886....	5 97
Fort Davis, Tex	do	March, 1886.....	59 08
Fort Bayard, N. Mex	By fire.....	do	7 29
Fort Custer, Mont	do	April, 1886.....	9 86
Grand River, Utah.....	By swamping of ferry boat.....	.....	94 85
Total.....	.....	.....	2,155 85

STORES INSPECTED AND CONDEMNED.

Value (original cost) of subsistence stores inspected and condemned during the fiscal year 1866	\$16,783 64
From such as were ordered sold there was realized the sum of	3,147 20
Net loss on account of stores condemned.....	13,636 44
From sales of condemned subsistence property there was realized the sum of \$94.37.	

COOKED RATIONS FOR RECRUITING PARTIES AND RECRUITS AT RENDEZVOUS.

There were disbursed in the fiscal year, \$33,627.11 for the subsistence of recruiting parties and recruits at rendezvous, the number of rations paid for being 65,192½, and the average cost per ration 51.58112 cents, an increase of .9059 of a cent per ration over the cost of the previous year.

ACCOUNTS AND RETURNS DIVISION.

Accounts and returns on hand June 30, 1885, received, examined, &c., during fiscal year ended June 30, 1886.	
On hand June 30, 1885, accounts current.....	333
Received during year, accounts current	2,492
	2,825
On hand June 30, 1885, returns of subsistence stores	290
Received during year, return of subsistence stores.....	2,040
	2,330
On hand June 30, 1885, returns of subsistence property.....	33
Received during year, returns of subsistence property.....	796
	829
Examined during year ended June 30, 1886:	
Accounts current (accompanied by 34,736 vouchers).....	2,307
Returns of subsistence stores (accompanied by 28,455 vouchers).....	1,861
Returns of subsistence property (accompanied by 1,638 vouchers).....	681
On hand June 30, 1886, awaiting examination :	
Accounts current.....	518
Returns of subsistence stores.....	469
Returns of subsistence property	148

The above accounts and returns, received during the year, were rendered by 446 officers.

In connection with the examination of these accounts and returns 3,472 letters were written, 1,407 referred, and 224 papers copied.

In addition 4,377 examinations and reports were made upon applications for certificates of non-indebtedness.

* * * * *

ARMY COOKS AND BAKERS.

I have several times heretofore invited attention to the subject of cooks and bakers for the Army, and it is so manifestly a matter of the greatest importance to the health and comfort of the enlisted men individually, and therefore to the efficiency of the Army, that I again recommend that Congress be urged to provide for the enlistment of one cook to each troop, battery, and company, and to each general depot of recruits, and of a baker to each garrisoned post.

That the Army of the United States is provided with a ration, ample in quantity and excellent in quality, has been demonstrated in war as well as in peace; but the articles composing it are furnished in the raw state and must be further prepared by the cook or the baker. Bake ovens, kitchens, ranges, cooking stoves and utensils are now provided by the Government, but no adequate provision has been made for their use in the best manner.

Everything is provided save one, and that one is the skilled hand absolutely necessary to transform the raw materials into good wholesome palatable food, the cook or baker.

DUTIES AND STATIONS OF OFFICERS OF THE SUBSISTENCE DEPARTMENT.

The duties and stations of officers of the Subsistence Department on the 30th day of June, 1896, will appear from the roster hereto appended.

During the year the officers of the department have been actively employed, and have performed their duties with their accustomed zeal, fidelity, and efficiency.

Very respectfully, YOUR OBLIGED SERVANT,

E. MACFEELEY.

Commissary-General of Subsistence.

The honorable SECRETARY OF WAR.

REPORT OF THE SURGEON-GENERAL

SURGEON-GENERAL'S OFFICE.

Washington, January 11, 1896.

SIR: I have the honor to submit the following statement of receipts and general transactions of the Medical Department of the Army for the fiscal year ending June 30, 1895:

FINANCIAL STATEMENT.

Medical and Hospital Department, 1895:

Balance on hand July 1, 1894	\$42 M
Balance to be accounted for July 1, 1895	\$42 M

Medical and hospital department, 1884:

Balance on hand July 1, 1885.....		\$28,895 44
Refunded during the year.....		31 81
		<hr/>
Total to be accounted for.....		28,927 25
Disbursed during the year.....	\$4,448 30	
Transferred to surplus fund.....	24,479 02	
	<hr/>	<hr/>
		28,927 25

Medical and hospital department, 1885:

Balance on hand July 1, 1885.....		94,357 96
Refunded during the year:		
By Signal Service Bureau, for supplies furnished...	\$667 68	
By recruiting service, for vaccine virus furnished..	26 00	
By Commissary Department, for board furnished to enlisted men of the Army by parties and hospitals.	69 00	
For medical and hospital supplies lost during trans- portation.....	4 50	
	<hr/>	767 18
Total to be accounted for		95,125 14
Disbursed during the year:		
For medical and hospital supplies.....	\$78,317 25	
For expenses of purveying depots.....	1,325 38	
For pay of employes	250 00	
For medical attendance, medicines, &c	1,688 40	
For miscellaneous expenses	269 04	
	<hr/>	81,850 07
Balance to be accounted for July 1, 1886		13,275 07
In United States Treasury	\$9,852 13	
In hands of disbursing officers.....	3,422 94	
	<hr/>	<hr/>
		13,275 07

Medical and hospital department, 1886:

Appropriated by act approved March 3, 1885.....		225,000 00
Refunded during the year:		
By Quartermaster's Department, for veterinary med- icines furnished.....	\$2,285 55	
By Signal Service Bureau, for medical supplies fur- nished to Fort Myer, Va.....	516 45	
By Army Medical Museum, for supplies furnished...	250 72	
On account of medical hospital supplies lost during transportation.....	45 00	
	<hr/>	3,097 72
Total to be accounted for.....		228,097 72
Disbursed to June 30, 1886:		
For medical and hospital supplies.....	\$57,743 90	
For expenses of purveying depots.....	4,135 74	
For pay of employes, viz:		
Medical purveying depot, New York, N. Y.....	\$12,428 25	
Medical purveying depot, Saint Louis, Mo.....	12,639 93	
Medical purveying depot, San Fran- cisco.....	5,922 46	
Office medical director Division of the Atlantic.....	1,800 00	
United States Army dispensary, Washington.....	2,750 00	
	<hr/>	35,540 64
For advertising.....	328 00	
For medical attendance, medicines, nursing, &c....	2,240 58	
For miscellaneous expenses.....	932 51	
	<hr/>	100,921 37
Balance to be accounted for July 1, 1886.....		127,176 35
Balance in United States Treasury.....	\$85,774 10	
In hands of disbursing officers.....	41,402 25	
	<hr/>	<hr/>
		127,176 35

The balance remaining on hand at the close of the fiscal year has already been, or will be, expended in the payment for supplies contracted for and other obligations incurred prior to July 1, 1886.

Signal Service, Medical Department, 1884 :

Balance on hand July 1, 1885 :

Medical attendance and medicines.....	\$739 00
Medical attendance and medicines to officers doing duty in connection with the Signal Service.....	100 00
Medical and hospital supplies at Fort Myer, Va.....	35 16
Medicines to officers and enlisted men from purveying depots and dispensaries	99 54

Total to be accounted for..... 973 70

Disbursed during the year:

For medical attendance and medicines.....	\$16 25
Transferred to surplus fund.....	957 45

973 70

Signal Service, Medical Department, 1885 :

Balance on hand July 1, 1885 :

Medical attendance and medicines	3,776 14
Medical attendance and medicines for officers doing duty in connection with the Signal Service.....	97 15
Medical and hospital supplies at Fort Myer, Va.....	415 64
Material for repair of hospital at Fort Myer, Va.....	74 83
Medicines to officers and enlisted men from purveying depots and dispensaries.....	1,000 00

Total to be accounted for..... 5,363 76

Disbursed during the year:

For medical attendance and medicines.....	\$303 08
For medical and hospital supplies at Fort Myer, Va..	373 58
For material for repair of hospital at Fort Myer, Va..	74 79
For medicines to officers and enlisted men, &c.....	475 74

1,727 19

Balance to be accounted for July 1, 1886..... 3,636 57

Signal Service, Medical Department, 1886 :

Appropriated by act approved March 3, 1885:

For medical attendance and medicines.....	5,000 00
For medical attendance and medicines for officers doing duty in connection with the Signal Service	100 00
For medical and hospital supplies at Fort Myer, Va	700 00
For work and supplies at Fort Myer, Va.....	300 00
For medical and hospital supplies to officers and enlisted men of the Signal Corps and purveying depots and dispensaries	1,000 00

Total be accounted for 7,100 00

Disbursed during the year:

For medical attendance and medicines	\$1,756 10
For medical and hospital supplies at Fort Myer, Va.	516 45
For work and supplies at Fort Myer, Va.....	299 87

2,572 42

Balance to be accounted for July 1, 1886 4,527 58

Artificial limbs, 1884 :

Balance from previous fiscal year.....	9,192 69
Disbursed during the year.....	\$344 33
Carried to surplus fund.....	7,405 16

7,749 49

Balance remaining June 30, 1885 1,443 20

Artificial limbs, 1885 :

Balance from previous fiscal year.....	9,218 45
Disbursed during the year.....	7,215 94

Balance remaining June 30, 1886..... 2,602 51

Artificial limbs, 1886:

Appropriated by act of March 3, 1885	\$400,000 00
Appropriated by act of March 26, 1886	175,000 00
Refunded during the year	8 25

Total to be accounted for	575,008 25
Disbursed during the year	475,012 32

Balance remaining June 30, 1886	99,995 93
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Appliances for disabled soldiers, 1884:

Balance from previous fiscal year	1,124 00
Carried to the surplus fund	1,124 00

Appliances for disabled soldiers, 1885:

Balance from previous fiscal year	1,703 50
Disbursed during the year	6 00

Balance remaining June 30, 1886	1,697 50
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Appliances for disabled soldiers, 1886:

Appropriated by act of March 3, 1885	2,000 00
Disbursed during the year	341 50

Balance remaining June 30, 1886	1,658 50
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Medical and Surgical History:

Balance from previous fiscal year	8,483 00
Refunded during the year	226 34

Total to be accounted for	8,714 34
Disbursed during the year	149 12

Balance remaining June 30, 1886	8,565 22
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Museum and library, 1885:

Balance from previous fiscal year	837 75
Disbursed during the year	837 75

Museum and library, 1886:

Appropriated by act of March 3, 1885	15,000 00
Disbursed during the year	12,560 30

Balance remaining June 30, 1886	2,439 70
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Expended in furnishing trusses under sections 1176, 1177, 1178, Revised Statutes	3,968 12
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ARTIFICIAL LIMBS AND TRUSSES.

There were furnished during the year .

In kind:

Trusses	730
Artificial legs	598
Artificial foot	1
Apparatus for legs	2
Arms	22

By commutation:

Artificial legs	2,652
Artificial feet	59
Artificial arms	3,040
Artificial hands	10
Apparatus for arms	924
Apparatus for legs	645

I would respectfully observe that in carrying out the laws for furnishing trusses some cases are observed in which there is apparent hardship, if not injustice; for instance, a soldier ruptured during the war with Mexico, although he may be receiving a pension on account of hernia, is not entitled to receive a truss. Under the law as it now stands (Secs. 1176, 1177, and 1178, Revised Statutes, and Supplement, p. 450), the following classes of persons are not entitled to trusses: Those who were ruptured at any time while serving as commissioned officers of whatever grade; those who were ruptured prior to April 19, 1861, *whether commissioned or enlisted*, although the disability may have

been incurred in the line of duty and during the prevalence of war; and those who have been ruptured since August 20, 1866, whether commissioned or enlisted, unless the disability may have been incurred in the line of duty during the war.

It is recommended that existing law on this subject be so amended as to correspond with that relating to artificial limbs; that is, to allow a truss, suitable to the disability, to every person who has been, or may hereafter be, ruptured in the line of duty while serving in the Army or Navy. It may be proper to add that the only evidence of rupture in the line of duty accepted by this office is that furnished by the Pension Office, that the applicant is in receipt of a pension (either wholly or in part) on account of hernia.

MEDICAL AND HOSPITAL SUPPLIES.

The money value of the medical and hospital supplies, actually issued during the fiscal year ended June 30, 1886, was \$168,119.06, and the cost of the supplies required for issue during the current year will probably exceed that amount. I base the estimate of the probable cost of the medical and hospital supplies which will be required for issue during present fiscal year on the fact that the average money value of the medical supplies issued annually during the fiscal years July 1, 1876, to June 30, 1886, was approximately \$183,000, exclusive of all other expenses.

In this connection I respectfully invite your attention to my estimate of appropriations required by the Medical Department of the Army for the service of the fiscal year ending June 30, 1888, submitted to you on the 16th instant, as follows:

For the purchase of medicines and hospital supplies, expenses of medical purveying depots, pay of employés, medical care and treatment of officers and enlisted men of the Army on duty at posts and stations for which no other provision is made; for the proper care and treatment of cases in the Army suffering from contagious epidemic diseases; advertising and other miscellaneous expenses of the Medical Department (the amount to be expended for pay of employés not to exceed \$46,000), \$225,000; for the purchase of disinfectants for general post sanitation, \$10,000; for medical and hospital supplies for the Army and Navy General Hospital at Hot Springs, Ark., \$4,000; for the service of the Army and Navy General Hospital, Hot Springs, Ark., including clerk, stewards, cooks, attendants, engineer, laundresses, laborers, watchmen, and other necessary employés, \$14,620; total, \$253,620.

The estimated amounts will, it is believed, be necessary to meet the wants of the Medical Department for the ensuing fiscal year. It becomes necessary, from time to time, to add to the standard supply table new remedies, new instruments, and new standard medical books, and to provide them for use by the medical officers of the Army in the proper diagnosis and treatment of disease.

By direction of the Secretary of War, disinfectants for general use in the Army are estimated for by the Medical Department (heretofore supplied by the Quartermaster's Department).

The limited number of contract surgeons allowed by law necessitates the temporary employment of private physicians, under existing regulations, to furnish medical attendance to officers and enlisted men at stations where there is no medical officer of the Army. These physicians are paid by the visit from the medical and hospital appropriation. Added to this is the necessary expenditure for the employment of skilled nurses for the proper care and treatment of epidemic contagious diseases.

I respectfully recommend, as specified in estimate submitted, that the

limit of amount of the appropriation to be expended for pay of employes of the Medical Department be increased to \$46,000. The largely increased amount of clerical labor required for the preparation of contracts and other papers pertaining to same renders necessary an increase of the clerical force at medical purveying depots.

I respectfully recommend, in order to facilitate the purchase and delivery of medical and hospital supplies, and for the best interest of the service with a view to economy, that Congress be requested to grant authority, in the purchase of medical and hospital supplies which cost less than \$500, to make such purchases after due advertisement for bids, without entering into a formal written contract. In many instances a strict compliance with the letter of the law and existing regulations, in preparing the formal executory contracts, *five copies of which are required*, entails an expense to the Government in clerical time and labor fully equal to the cost of the article for which the contract is made. It is not believed that such was the intention of the framers of the laws relating to purchases of Government supplies.

HEALTH OF THE ARMY.

The medical, surgical, and meteorological statistics of the Army for the calendar year ending December 31, 1885, are respectfully submitted.

The following table shows in brief the more important facts that are to be presented:

† General statistics of the health of the Army for the year.	White.	Colored.	Total.
Average mean strength, as shown on the medical reports, during the year	21,944	2,194	24,138
Number of admissions to sick report during the year†	20,089	3,301	32,990
Treated in hospital	12,520	1,180	13,650
Treated in quarters or field	17,169	2,171	19,340
Ratio of admissions to 1,000 of mean strength	1,353	1,505	1,367
Ratio for the previous year	1,509	1,754	1,523
Ratio for the preceding decade	1,692	1,845	1,706
Admitted for disease	24,353	2,639	26,992
Ratio per 1,000 of strength	1,110	1,203	1,118
Admitted for injuries	5,336	602	5,938
Ratio per 1,000 of strength	243	302	248
Average number constantly sick during the year	898	93	991
Ratio per 1,000 of strength	41	42	41
Ratio for the previous year	44	49	44
Ratio for the preceding decade	44	45	44
Average days of service lost by sickness to each man of the above force during the year	15	15.5	15
Average days of service lost by sickness to each man of the force during the previous year	16	18	16.3
Average days of service lost by sickness to each man of the force during the preceding decade	16.2	16.3	16.3
Average number of days each case was treated	11	10	11
Number of deaths from all causes	108	14	122
Ratio per 1,000 of mean strength || .....	7.7	6.4	7.5
Ratio for the previous year	10.7	13.1	10.9
Ratio for the preceding decade || .....	12.5	14.8	12.7
Number of deaths from diseases	108	7	115
Number of deaths from injuries	60	7	67
Number of discharges for disability	694	63	757
Ratio per 1,000 of mean strength || .....	32	29	31
Ratio for the previous year	37	31	36
Ratio for the preceding decade || .....	34	32	34
Number of discharges for disease	633	55	688
Number of discharges for injuries	61	8	69

* The average mean strength of command is based upon the number of troops actually present on each day of the year, with such commands as are provided with medical officers, troops present sick and military prisoners, except such as are discharged from service, being included.

† Indian scouts (two hundred and fifty-two) are not included in this table.

‡ This number includes all cases of disease or injury on account of which officers and enlisted men are excused from any part of their military duty.

|| The death and discharge rates here given are higher than they should be, as they are computed upon the strength of such troops as are provided with medical officers, and not upon the strength of the entire Army, which the report of the General of the Army, under date of June 30, 1885, shows to have been (deducting Indian scouts) 26,542. The true death rate for the year, therefore, was 6.9 per 1,000, and the discharge rate 29 per 1,000 of strength, while the annual rates for the preceding decade were 11.7 deaths per 1,000 of strength and 31 discharges per 1,000 of strength.

The consolidated returns of this office show for the Army a year of exceptional freedom from disease, although it has been one of unusual activity and hardship for troops stationed on the Southwest frontier.

The actual number of admissions to sick report was 3,839 less than for the preceding year, while the ratio of cases to mean strength of command was considerably lower, being as 1,367 per thousand is to 1,532 per thousand.

Compared with the average rate for ten years preceding, the admissions were about one-fifth less.

The number of cases receiving hospital treatment was 13,650, or 568.5 per thousand of strength. The hospital admissions comprise the more serious cases, and they are the only ones that can be used in making comparisons with the sick rates of the Navy, or with those of the British army. Reports of the former show for the year 1884 an admission rate of 967 per thousand of the force afloat; and of the latter, for troops serving in the United Kingdom (1870-79), 809 per thousand of strength.

It is a matter of congratulation that not only the admission rate for the troops, but also the death-rate, has fallen to a lower point than at any time within the history of the Medical Department.

Comparisons with the ratios of admissions and deaths for all the years of peace since 1839 will show a progressive and apparently permanent improvement in health.

Year.	Ratio of cases of disease and injuries to 1,000 of strength.	Ratio of deaths to 1,000 of strength.	Ratio of deaths to 1,000 cases treated.	Year.	Ratio of cases of disease and injuries to 1,000 of strength.	Ratio of deaths to 1,000 of strength.	Ratio of deaths to 1,000 cases treated.	Year.	Ratio of cases of disease and injuries to 1,000 of strength.	Ratio of deaths to 1,000 of strength.	Ratio of deaths to 1,000 cases treated.
1840.....	3,784	25	9.0	1854.....	3,638	32	10.3	1872.....	1,912	16	8.2
1841.....	3,849	40	10.3	1855.....	3,281	33	10.2	1873.....	1,933	17	8.6
1842.....	3,243	30	9.2	1856.....	3,209	25	7.7	1874.....	1,785	13	7.2
1843.....	2,719	16	6.0	1857.....	2,837	14	4.8	1875.....	1,678	11	6.7
1844.....	2,448	11	4.5	1858.....	2,632	14	5.4	1876.....	1,600	23	13.4
1845.....	2,619	9	3.5	1859.....	2,360	16	6.7	1877.....	1,756	13	7.4
1846.....	2,938	27	9.2	1860.....	2,230	10	4.4	1878.....	1,515	13	8.8
1847.....	(*)	(*)	(*)	Civil war...	(*)	(*)	(*)	1879.....	1,760	12	7.1
1848.....	(*)	(*)	(*)	1861.....	2,629	65	25.4	1880.....	1,708	11	6.1
1849.....	3,062	80	28.2	1862.....	3,006	54	17.8	1881.....	1,789	10	5.6
1850.....	2,684	34	12.3	1863.....	2,007	33	11.4	1882.....	1,688	11	6.3
1851.....	2,725	32	11.8	1864.....	2,540	16	6.4	1883.....	1,888	12	6.8
1852.....	2,800	25	8.9	1865.....	2,097	14	6.8	1884.....	1,632	11	7.1
1853.....	3,839	28	9.4	1866.....	2,064	17	8.3	1885.....	1,367	7	5.5

* The years of the war with Mexico and the civil war are omitted.

† Year of the cholera.

‡ An epidemic of small-pox during this year furnished 877 deaths.

§ An epidemic of cholera furnished 1,310 deaths.

|| An epidemic of cholera and yellow fever furnished 681 deaths.

¶ Year of the Custer massacre, in which 247 officers and men were killed on the Little Big Horn River, Dakota.

Losses to the Army from discharges for physical disability have also decidedly decreased, though not to the extent shown by the death-rate.

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SURGICAL REPORT FOR THE YEAR.

Upon consolidated reports of the Medical Department received at this office during the year, there were returned 6,016 cases of injuries, of which 3,393 were cases of contusions and sprains, that, while contrib-

ing materially to the non-effectiveness of the troops, were not of a serious nature.

The rate of occurrence for injuries was 247 per thousand of strength, against 27.3 per thousand for the previous year.

Deaths from wounds or other violent causes numbered 72, being in the proportion of 2.95 per 1,000 of strength to 3.45 per 1,000 for the previous year. The number of discharges on certificates of disability for this cause was 69. Appendix B will show, in tabular form, the specific nature of the various causes of death from injuries, with ratios for white and colored troops separately.

The years 1883 and 1884 were without casualties from actual warfare. Early in the spring of 1885, however, an outbreak occurred among the Chiracahua Apaches, which was followed by several engagements, in which our troops (chiefly Indian scouts) suffered some losses.

At Devil's Creek, New Mexico, May 22, Troops A and K of the Fourth Cavalry, and Indian scouts, under Capt. A. Smith, Fourth Cavalry, engaged the band mentioned, with the loss of 1 enlisted man and 1 scout wounded. The casualties among the hostiles, if any occurred, could not be ascertained. The wounded were transferred to Fort Bayard, N. Mex., and placed under the care of Surg. V. B. Hubbard, U. S. Army. Near Oporto, Mexico, whither the hostiles had been followed by Capt. L. Crawford, of the Third Cavalry, and his command of Indian scouts, an affair occurred on the 23d of June, in which 1 scout was wounded, 1 hostile killed and 3 wounded. Asst. Surg. P. R. Egan, U. S. Army, was in attendance and cared for the wounded.

August 7, in the Sierra Madre Mountains, Mexico, Lieut. M. W. Day, Ninth Cavalry, commanding Indian scouts, met the hostiles, with a result of 5 killed, 3 wounded, and 15 captured on their side, our troops sustaining no casualties. Asst. Surg. H. P. Birmingham, U. S. Army, was with the command and furnished the report.

September 22, in the Torres Mountains, Mexico, Capt. W. Davis, Fourth Cavalry, commanding Indian scouts, had an engagement with the hostiles, in which he lost 1 scout killed and 1 wounded, the hostiles leaving on the field 1 killed and several wounded. Asst. Surg. H. P. Birmingham, U. S. Army, was with the command and reported the casualties.

November 7, near Beyer's Springs, N. Mex., a patrol guard of the Sixth Cavalry was ambushed by hostile Apaches. One Indian scout was killed and 1 enlisted man wounded.

December 8 and 9, at Clear Creek, New Mexico, a detachment of Troop C, Eighth Cavalry, Lieut. S. W. Fountain, Eighth Cavalry, commanding, attacked the hostile Apaches, killing 2 and wounding several; no casualties occurred among the troops. Asst. Surg. T. J. O. Maddox, U. S. Army, was with the command and furnished the report.

December 19, at Little Dry Creek, New Mexico, the same command was ambushed by the hostiles. In this affair 1 officer and 4 enlisted men were killed, and 1 officer and 2 enlisted men wounded, Assistant Surgeon Maddox losing his life.

This engagement closed the melancholy list and completed a total of 7 killed and 8 wounded.

In addition to the casualties of battle, the rifle-range furnished its quota of gunshot wounds, 3 of which were instantly fatal; besides, 3 men being lost to the service by discharge for disability from this cause. The remaining 12 were returned to duty cured.

Of the instantly fatal cases for the year 1 was a shot wound in the

head, 1 of the face, and 1 of the abdomen. The location of injury in 15 cases where recovery took place was as follows: Scalp, 3; face, 2; neck, 1; chest, 1; femur, fracture, 1; finger, fracture, 1; arm, flesh, 3; leg, flesh, 3.

In the preparation of ammunition for use in rifle practice there occurred 13 cases of injury from explosion of cartridges. All were followed by recovery and return to duty. Location of injury: face, flesh wound, 1; neck, in, 2; fingers, fractured, 3; arms, flesh wounds, 8; legs, flesh, 2.

In addition to the casualties of battle and the rifle-range, there were other cases of death from shot wounds, the result of homicide, suicide, and accident, which are shown in the following table:

Cause of death.	Cases	Anatomical location.					
		Head.	Face.	Neck.	Chest.	Abdomen.	Extremities.
Homicide.....	2	1	.....	.....	.....	1	.....
Suicide.....	9	.....	1	.....	.....	.....	.....
Accident and other shooting.....	6	.....	.....	1	3	1	.....
In action.....	6	.....	1	.....	3	1	1
Aggregate.....	23	1	2	1	6	3	1

* * * * *

There were reported 37 operations consequent on shot injuries. Twenty-eight of these were amputations: 1 a simple incision, 1 extraction of bone, 6 for extraction of the missile, and 1 operation for a return of protruding intestines after a perforating gunshot wound of the abdominal walls. In this case death from shock and peritonitis took place within twenty-four hours.

There were 95 shot injuries treated conservatively, and in 8 cases death resulted.

In addition to the foregoing, there were reported 147 operations for diseases or injuries other than shot wounds, 4 deaths resulting.

Three were resections of bone, 5 ligations of arteries, and the others miscellaneous operations, as shown in the table.

Anæsthetics were employed in 138 operations. General anæsthesia was produced by the use of sulphuric ether in 95 cases; by a mixture of chloroform and ether in 24 cases; by chloroform alone in 4; as a local anæsthetic, the ether spray was used in 6 cases; the hydrochlorate of cocaine in 10 cases. In 28 operations the reporters failed to state whether anæsthetics were used, and in 18 none was employed. No fatal results following the administration of these drugs have been returned.

Threatening symptoms occurred in 3 cases where ether was used, and in 1 operation under chloroform. In 1 case, where a mixture of chloroform and ether was employed, there was great difficulty in the production of anæsthesia and its use followed by cessation of respiration, prostration and vomiting.

Cocaine was satisfactorily used in 2 operations upon the eye, in 2 single incisions, 1 extirpation of the toe-nail, 1 operation for hemorrhoids, 1 circumcision, 2 operations for urethral stricture, and one for varicocele.

The use of Esmarch's elastic bandage for the control of hemorrhage during surgical operations was reported in 18 cases, as follows:

Nature of operation.	Times performed.	Nature of operation.	Times performed.
Amputation of the fore-arm.....	3	Amputation of the thigh.....	1
Amputation of the leg.....	1	Amputation of the ankle joint.....	2
Amputation of the foot.....	1	Amputation of the fingers.....	3
Amputation of the toes.....	2	Excision of the radius.....	1
Ligature of the radial artery.....	1	Ligature of the dorsalis pedis artery...	1
Necrotomy of femur.....	1	Necrotomy of metacarpus.....	1
Operation for aneurism.....	1		

In 2 of these cases there was a troublesome capillary hemorrhage following the removal of the constricting bandage. Asst. Surg. C. N. B. Macauley, U. S. Army, reported a case of intermediary amputation of the fore-arm, following shot fracture, where severe oozing continued five hours after operation; it was checked by the free use of liquor ferri subsulphatis.

Asst. Surg. H. G. Burton, U. S. Army, also reports in a primary amputation of the ankle joint for shot fracture that there was profuse capillary hemorrhage after the removal of the tourniquet, which was with difficulty controlled; this oozing continued through the night.

Antiseptics.—Antiseptics were employed during surgical operations as follows: Solutions of the mercuric bichloride in 32 cases, carbolic acid in 26, salicylic acid in 2. In 108 cases no antiseptics were used, and in the remaining 16 no information is given as to what substance was employed.

For surgical dressings after operations, solutions of carbolic acid were used in 46 cases, the mercuric bichloride in 26, iodoform in 28, chlorinated soda in 2. In 73 cases antiseptics were used, and in 9 no information was furnished.

Complications.—As complications to shot wounds, there was reported 1 case of chronic tetanus following a wound of the upper extremity, 1 case of acute mania, with amputation of the thigh for shot fracture, 2 cases of partial paralysis following flesh wound of the chest, the loss of sight in one eye from a shot wound of the face. No cases of erysipelas or pyæmia were reported.

Vaccinations.—The following tables, compiled from the monthly consolidated reports of the Medical Department of the Army, show the number of troops vaccinated and revaccinated during the year, with ratios per 100 of successes and failures.

The tables also show comparative results following the use of bovine and humanized virus.

Out of 8,845 vaccinations, there were reported 389 cases in which the conditions produced were of sufficient gravity to cause admission to sick report. No deaths were reported from this cause.

The character of the lesions, in most cases, were normal, although in a few instances, where the bovine virus had been used, the occurrence of great prostration, high fever, diffuse cellulitis, swelling of axillary lymphatics, and erysipelas were reported.

Recruiting.—There were received during the year very complete monthly reports of the examinations of recruits for the Army from 129 military stations and 25 recruiting rendezvous and depots.

These reports show that there were inspected by medical officers 16,805 applicants for enlistment. Out of the whole number examined, there were accepted into service 7,244 men and rejected on primary inspection 9,561, or about 57 per cent. of all presenting; of all recruits accepted on primary examination, there were rejected on re-examination at depots 56, or eight-tenths of 1 per cent.

For lack of sufficient clerical force, it has been impossible to arrange all the statistical data given upon these reports, but such general facts as relate to the various causes of rejections are herewith submitted.

By far the most frequent causes of non-acceptance were imperfect mental and physical development and general unfitness. For these reasons, there were rejected 1,996 applicants, or about 12 per cent. of all persons presenting. What these terms really imply is best set forth by Surgeon Greenleaf, U. S. Army, in his *Epitome of Tripler's Manual of the Examination of Recruits*, 1883:

We frequently see men whose constitutions may or may not have been originally feeble, but who, from unfavorable hygienic circumstances, have aggravated or acquired this feebleness, debility, or general unfitness. There is partial or general emaciation, mental sluggishness, a listless air, a torpor of all the faculties, absence of activity, indifference to all their surroundings. Too lazy or too feeble to work, they seek the service as an asylum only, without the least notion of ever performing their duties. Such men are cases for absolute rejection.

Diseases and injuries of the locomotor system, such as curvature of the spine, deformities of the legs and of the feet and toes, diseases and injuries of the joints, &c., furnished 1,190 rejections, or 7 per cent. of all persons examined.

Disease of the organs of circulation furnished 858 rejections, or about 5 per cent.; 9 of these cases were discovered on secondary inspections at recruiting depots. For diseases of the heart and valves there were 237 rejections, and for varicose veins 621.

Diseases of the digestive system contributed 831 rejections, or about 5 per cent., hemorrhoids, the loss of teeth, and hernia being the most frequent causes.

On account of visual defects there were 604 rejections, or about 4 per cent. Under the head of impaired vision alone, there were 485 rejections. Seventy-two men were definitely recorded as myopic, and 5 as astigmatic. One case of color-blindness was discovered.

There were only 22 rejections for defective vision among colored applicants, the ratio being about one-half less than for the white.

Diseases of the urinary and reproductive organs furnished 691 cases; over 500 of these were for varicocele.

The rate among white recruits was considerably higher than among colored, standing as 6 to 4 per 100.

There were 429 syphilitics detected, and 98 persons having other venereal diseases. Relatively the colored applicants furnished the greater number.

For intemperance there were 376 rejections, the rate among white applicants being very nearly four times greater than among the colored.

A detailed exhibit of all causes of rejection during the year will be found attached to this report, Appendix D.

WORK PERFORMED IN THE RECORD AND PENSION DIVISION DURING THE FISCAL YEAR ENDING JUNE 30, 1886.

The total number of official calls upon the Record and Pension Division during the year for information as to the cause of death in cases of deceased soldiers, and for the hospital record of invalids, was 53,352,

being 9,344 more than the number of similar applications during the previous year. Including the 3,349 applications remaining unanswered at the end of the last fiscal year, the total number of cases to be disposed of was 56,701.

Of the new cases, 6,037 were received from the Commissioner of Pensions, 41,679 from the Adjutant-General of the Army, and 2,636 from miscellaneous sources. All original calls in pension cases for information regarding deceased or discharged soldiers are now received from, and returned through, the office of the Adjutant-General of the Army.

Replies have been furnished to the proper authorities in 48,120 cases, of which 5,714 were to the Commissioner of Pensions, 40,043 to the Adjutant-General of the Army, and 2,363 to miscellaneous applicants, leaving 8,581 to be searched and reported on. In addition to the number of reports above stated as furnished to the Commissioner of Pensions, 1,759 have been prepared and furnished the same officer by the administrative and miscellaneous branch of the office; making a total of 7,473 furnished to the Pension Office (direct) during the year.

In October, 1885, 10 clerks were detailed from this division for temporary duty in the Adjutant-General's Office to assist in the preparation of pension cases in that office before their transmission to this office. This number was increased in February, 1886, to 20. On the 3d of July, 1886, these clerks were recalled to assist in the preparation of cases remaining unanswered in this office.

During the year, 27,419 folios of worn and dilapidated hospital registers of sick and wounded, containing 814,115 entries, were copied and preserved from destruction; there were also 34,019 entries copied from worn prescription books.

The work of preparing index registers of the lists of wounded in the war of the rebellion (arranged alphabetically and by States) has been practically completed, 39,735 names having been entered during the year.

There were received and filed 41 bound volumes of hospital records during the year; 8 volumes were transmitted to the Adjutant-General, leaving a total of 18,783 volumes on file at the end of the fiscal year.

From the medical officers in charge of military stations and commands, 2,357 consolidated monthly reports were received, upon which are recorded the names and complaints of all officers and enlisted men admitted to treatment during the year. These have been carefully examined, and all missing data necessary to the settlement of pension claims called for by correspondence, the statistical information they contain has been consolidated for reference, and the deaths and discharges for disability entered in alphabetical registers of this office. There were also received and filed 1,341 monthly reports of examinations of recruits, 110 special medical reports, 160 surgical reports, 1,052 monthly sanitary reports, and 7 lists of casualties from commands engaged with hostile Indians during the year.

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MEDICAL AND SURGICAL HISTORY OF THE WAR.

The publication of the third medical volume, the last of the series composing the Medical and Surgical History of the War, has been delayed by the pressure of current work at the Government Printing Office.

The manuscript was ready for the press in February last, but little progress was made in printing during the continuance of the session of Congress.

At the present date all the plates, diagrams, and other materials for the illustration of the volume are on hand, and page proofs of the first hundred pages of the work have been filed in this office.

HYGIENE OF THE ARMY AND POST SANITATION.

Increased attention to the hygienic needs of the soldier and to the subject of sanitation at all military posts, with gratifying results, is shown in the monthly sanitary reports received at this office, and in the diminished rates of sickness and mortality for the year, demonstrating clearly that the prevention of disease in accordance with an intelligent knowledge of hygienic and sanitary laws is not less important on the part of the medical officer than the ability to treat skillfully existing forms of disease, all of which may be considered to have their origin, more or less remotely, in the violation of natural laws. The cheerful and appreciative co-operation of commanding officers in this matter is also especially gratifying. While some improvement in methods of cooking for soldiers' and hospital messes is observed, there is still a wide field for improvement, and I cannot but urge that means should be devised for the proper instruction of Army cooks, believing it to be essential to the physical and moral well-being of the troops.

During the past year five ice machines have been ordered for posts located in the intensely hot regions of Texas and Arizona; it is hoped and believed that they will secure to the garrisons so situated a much-needed comfort and to the sick an indispensable necessity.

DISABLED MEDICAL OFFICERS.

The number of medical officers permanently disabled is becoming a matter of serious embarrassment to the efficiency of this department. There are now 4 officers who have been recommended for retirement by retiring boards, and at least 6 other officers who can do no more active service. The interests of the department demand that their places should be filled by young and active men, and it is hoped that Congress may be induced to afford relief by special or general legislation.

FAILURE TO APPROPRIATE MONEY FOR COOKS AND NURSES IN POST HOSPITALS.

I would respectfully invite attention to the failure of Congress at its last session to appropriate money for the payment of extra-duty pay to enlisted men detailed as cooks and nurses at post hospitals. As this service is absolutely necessary for the welfare of the sick of the Army, it is hoped that Congress will be pleased to make provision for the payment of such services as may be rendered gratuitously during the current year.

HOSPITAL CORPS.

In view of the failure of the last Congress to appropriate money for the payment of extra-duty pay to enlisted men detailed as cooks and nurses in post hospitals, and the consequent embarrassment to the hospital service; also, in view of the present unsatisfactory and objectionable system of details for this important service, I would respectfully reiterate the necessity for the organization of a hospital corps, by the enlistment of able-bodied and intelligent men, who shall be thoroughly trained and instructed as cooks, nurses, attendants, and litter and

stretcher bearers, thus preparing the Medical Department for any emergency of peace, war, or epidemic.

Similar organizations have been perfected in the armies of the principal European powers, and their usefulness and efficiency have been well and thoroughly tested.

I would strongly recommend the detail of a board of competent medical officers to prepare a plan of organization for a hospital corps suited to the conditions of our Army, with a view to Congressional action.

HOSPITAL STEWARDS.

A bill to increase the efficiency of the hospital stewards of the Army, in accordance with the recommendations made in the last annual report, has passed the Senate and has been favorably reported from the Military Committee of the House of Representatives; while, in my opinion, the compensation allowed this valuable class of non-commissioned officers is rated at too low a figure, it is hoped that this bill will become a law at an early date.

PROVIDENCE HOSPITAL.

Under the provisions of the act of March 3, 1885, making appropriation of \$15,000 "for the support and medical treatment of seventy-five transient paupers, medical and surgical patients, in the city of Washington, under a contract to be made with the Providence Hospital by the Surgeon-General of the Army," a contract was duly entered into with the institution named, and has been fulfilled to my satisfaction and without complaint on the part of the persons sent there for treatment.

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MISCELLANEOUS.

The requirements of the Army as regards medical officers during the past year have been as follows:

Number of permanent posts	123
Number of temporary posts and substations	70
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Total	193
Number of military expeditions in the field during the year.....	4

The services of 9 medical officers were required with these expeditions; there were also 145 medical officers reported to this office as having been on duty with scouting parties and on other field service during the year.

The Army Medical Examining Board, convened in New York City on the 6th of April, 1885, is still in session for the examination of candidates for admission to the Medical Corps of the Army and of assistant surgeons for promotion. The following is a recapitulation of the work performed by the board during its session:

Assistant surgeons examined for promotion	8
Candidates for appointment in the Medical Corps invited to appear for examination	76
	<hr/>
Candidates found qualified	7
Candidates rejected	16
Candidates who withdrew after partial examination.....	25
	<hr/>
Total examined	50
	<hr/>
Candidates who failed to appear for examination	10
Candidates who declined to appear for examination.....	4
Number invited but not examined	20

The names of the approved candidates have been submitted to the Secretary of War for appointment as assistant surgeons, and 5 have thus far received such appointment, leaving 2 to be appointed as vacancies may occur.

J. H. BAXTER,
Acting Surgeon-General, U. S. Army.

REPORT OF THE PAYMASTER-GENERAL.

PAYMASTER-GENERAL'S OFFICE,
Washington, D. C., October 11, 1886.

SIR: I have the honor to submit my report of the transactions of the Pay Department of the Army for the year ending June 30, 1886.

The tabular statements appended show in detail the fiscal operations of the Department for that year, summarily stated as follows:

RECEIPTS AND DISBURSEMENTS DURING THE FISCAL YEAR ENDING JUNE 30, 1886.

Balance in hands of paymasters July 1, 1885.....	\$1,465,139 76
Amount received from the Treasury.....	12,966,000 00
Amount received from soldiers' deposits.....	469,031 55
Amount received from paymasters' collections.....	274,969 36

Total to be accounted for..... 15,175,140 67

Accounted for as follows:

Disbursements:

To the Army.....	\$12,912,700 01
To the Military Academy.....	208,604 70
To the Signal Service.....	230,947 89
To the volunteers (on Treasury certificates).....	92,480 55

Total.....	13,444,733 15
Surplus funds deposited in Treasury.....	202,148 53
Paymasters collections deposited in Treasury.....	274,969 36
Balance in hands of paymasters' June 30, 1886.....	1,253,289 63

Total accounted for 15,175,140 67

So far as this office has been advised there has been no delinquency in the prompt payment of the troops, and I take pleasure in commending the officers of the Department for the diligence displayed in the discharge of all duties required of them, especially the officers on duty in the Department of Arizona and the District of New Mexico. Notwithstanding the fact that the troops in the recent Indian campaign on the Mexican border were scattered into numerous camps, posted distant from all usual lines of travel and reached only after days of dangerous and fatiguing travel, the duty of paying these troops was promptly performed.

Of the total amount disbursed to the Army \$5,273,448.90 was disbursed in the field, the greater portion of it in small and broken amounts over the pay-table on the bimonthly muster and pay rolls. To make these disbursements, as will appear from the statement herewith, the officers traveled 234,040 miles; of this distance, 42,292 miles were by stage and ambulance. The disbursements, aggregating \$13,444,733.15, were made without loss to the Government.

There has been no change since my last report in the number of officers in this Department.

SOLDIERS' DEPOSITS.

The deposit system authorized by the act of May 15, 1872, seems to be growing in favor with the enlisted men of the Army.

The number of deposits made during the last fiscal year was 7,261, amounting to \$469,031.55, showing an increase over the previous year of 228 in number and of \$41,413.59 in amount. The number of new accounts opened with depositors during the year was 1,557, as against 1,411 in the previous year.

Since the act went into effect, July 1, 1872, to the close of the last fiscal year, the total amount of deposits was \$5,506,543.12, and of the repayments \$4,426,992.19, leaving a balance of \$1,079,551.23 to the credit of depositors.

This certainly is a very creditable showing for the enlisted men of the Army.

STOPPAGES.

Under the regulations and the law (sec. 1766, Rev. Stats.) prohibiting payment to an officer in arrears to the United States, this office is charged with the collection of all stoppages and arrears reported against officers in service.

During the fiscal year ending June 30, 1886, there were four hundred and ten stoppages made against officers, amounting to \$22,133.37, as follows:

By request of Quartermaster-General.....	\$1,702 87
By request of Commissary-General	434 07
By request of Chief of Ordnance.....	580 28
By request of accounting officers of Treasury (sec. 1766, R. S.).....	10,797 18
Court-martial fines.....	2,496 78
Stoppages arising in paymasters' accounts.....	6,122 19
	<hr/>
	22,133 37
Of this amount there was collected	12,670 50
Withdrawn.....	6,251 95
	<hr/>
	18,922 45
	<hr/>
Balance remaining on the books June 30, 1886.....	3,210 92

PAYMASTERS' CHECKS.

I would recommend that the necessary legislation be asked to direct that the checks of the disbursing officers of this Department be forwarded, after payment, at the end of each month, by the Treasurer, the several assistant treasurers, and United States depositories, on whom they are drawn, through this office for file with the vouchers received therefor by the paymasters. The bringing together of the voucher and the evidence of its payment, when paid by check, would complete the record in the hands of the accounting officers that the payment had been made to the party entitled to the same. Such a regulation would also speedily develop any instance of the issue of a check against an official credit for a purpose not authorized by law.

PAYMASTER-GENERAL'S OFFICE.

The reports from the several divisions of the office show as follows:

Accounts rendered by paymasters, on hand July 1, 1885.....	76
Accounts received to June 30, 1886.....	531
	<hr/>
Total	607
Accounts sent to Second Auditor.....	557
	<hr/>
Accounts on hand June 30, 1886.....	50

Payments recorded	58,892
Vouchers examined	49,674
Letters received and entered	9,053
Letters written	4,640
Indorsements written	2,839

In the Division of Volunteer Records the number of cases on hand for report to the Adjutant-General and Second Auditor, July 1, 1885, was 408
 Received to June 30, 1886..... 31,899

Total 32,307
 Cases answered 27,635

Cases on hand June 30, 1886 4,612

The number of cases on hand September 30, was 3,203, a reduction of 1,404 since the close of the fiscal year.

The large increase in the number of cases remaining on hand arises from recent legislation opening a new class of claims not anticipated when I recommended in my last estimates a reduction of the clerical force of the office. While some delay will arise in disposing of cases, it is not believed that it will warrant the employment of an additional number of clerks.

I invite attention to the appended report of payments made to colored soldiers by Maj. I. O. Dewey, paymaster, United States Army, in charge of payment of bounty and arrears of pay on Treasury certificates.

I am, sir, very respectfully, your obedient servant,

WM. B. ROCHESTER,
Paymaster-General, U. S. A.

The SECRETARY OF WAR.

REPORT OF THE CHIEF OF ORDNANCE.

WAR DEPARTMENT, ORDNANCE OFFICE,
 Washington, October 1, 1886.

SIR: I have the honor to submit the following report of the principal operations of the Ordnance Department during the fiscal year ended June 30, 1886, with such remarks and recommendations as the interests of this branch of the military service seem to require.

* * * * *

THE ARMAMENT OF FORTIFICATIONS.

The Board on Fortifications or other Defenses appointed under the act of March 3, 1885, rendered its report to Congress on the 23d day of January last. That report gives an exhaustive survey of the subjects that came within the province of the Board, and closes with clear, definite, and practical recommendations, accompanied by estimates, which should they meet with favorable action from Congress, would result in placing our principal ports in a secure state of defense, and in insuring the production within our own borders, at an early day, of the steel forgings requisite for the construction of the heaviest armor and guns.

The report indorses the recommendation of the Gun Foundry Board touching the establishment by the Government of two gun factories, one for the Army and the other for the Navy; and Congress also by legislation at its last session, in enabling the Navy Department to begin the establishment of such a factory at the Washington navy-yard, practically endorsed, and gave effect to that recommendation. A bill em-

bracing similar provisions with respect to the establishment of an Army gun factory at the Frankford Arsenal was indeed passed last session by the Senate, but failed to obtain the concurrence of the House, and still remains in conference. Under one provision of that bill, \$400,000 were appropriated for completing and testing the guns which the Department has now under construction, for procuring guns, carriages, powders, projectiles, &c., and "for the purchase, manufacture, and erection of the necessary tools and machinery for the finishing and assembling of heavy ordnance at the Frankford Arsenal, Philadelphia, Pa." By still another provision \$6,000,000 were appropriated, to be available for a period of six years from the date of contract, for the purchase of rough bored, turned, and tempered steel forgings, suitable for heavy ordnance, adapted to modern warfare,—the amount appropriated to be divided equally between the Army and Navy. The features of this bill as a whole are judicious and well devised, except that the very important question of fortifications is wholly ignored. But no doubt great good would have resulted from the passage of the bill in its present shape by Congress. The want of machine shops under its own control, fully adequate to the manufacture of type guns of various calibers, has been a great obstacle to the Department in its experimental work and in the constructional development of heavy guns. Under the provisions of this bill a start would have been made in the right direction, by laying at least the foundation of a gun factory at the Frankford Arsenal, and which under a fostering legislation would be added to from year to year. Thus the effect of the annual appropriations would be cumulative, and the Department would ultimately possess a fully equipped and organized factory, capable of producing both type guns and, in limited supply, the guns for issue to the service. The advantages accruing to the Government from establishments of its own have been so fully and forcibly presented in the report of the Gun Foundry Board as to require no reiteration or enlargement here. It will suffice to say that an Army gun factory is a great want, and it is most earnestly recommended that Congress take such action at its next session as will place the Department on, at least, an equal footing with the Navy in respect to such an establishment. The appropriation of \$6,000,000 for steel forgings is perhaps scarcely sufficient to arouse much competition among steel makers, but it would doubtless prove a healthful stimulus to those manufacturers who are now engaged in supplying the Government with gun forgings. The amount recommended by the Board on Fortifications or other Defenses for gun metal for the first year alone was \$8,000,000, while for inaugurating the production of armor plates, laying the foundations for fortifications, manufacturing gun carriages, submarine mines, torpedo boats was \$13,500,000, making the total amount recommended for the first year \$21,500,000. In these recommendations of the Board this Department fully concurs.

Through the failure of the regular fortifications appropriation bill to become a law at the last session of Congress, serious injury has been sustained by the Department, and its operations as regards the armament for fortifications, for the fiscal year 1886-'87, such as the completion and test of the experimental guns under construction, the further development of powders and explosives, and the alterations of carriages for mounting existing guns have practically ceased, except in so far as that work is continued over from last year by existing contracts.

And not only has the work come to a standstill, of itself a great evil, but the *personnel* of the Department, employed on the work, has been almost entirely discharged. The force of civilians employed at the

proving ground, consisting of men of long experience in handling guns and explosives, and doing the technical work in connection with an ordnance proving ground, has been lost to the Department, and the operations now practicable at that point must be carried on by means of enlisted men taken from the arsenals, who will require very considerable instruction and practice to fit them for the proper discharge of their new duties.

At the Watertown Arsenal, where the Department has had under construction the experimental 10-inch wire guns, the alteration of sea-coast carriages, and the manufacture of gun-sights and other supplies pertaining to the armament of forts, work has practically ceased, and the large force of skilled men has been discharged. The expense and labor attending the recommencement of work, like the installation of new work, is very considerable, and is made apparent in the increased cost of the articles produced. The difficulty also of getting skilled men for such technical work, of organizing, of instructing, of getting the right man in the right place, and of determining the best and cheapest manner of doing the work—all matters of great moment—has to be again encountered and overcome after a period of enforced idleness. But the difficulty of procuring good men, when work is resumed, becomes more difficult than ever, from the feeling of uncertainty regarding the permanency of their employment.

The interruption of the work in hand has proved a source of great discouragement, nevertheless every effort has been continued to perfect the plans of the Department and to maintain the well-reputed interest and ability of its officers on these subjects, under the hope, which is believed to be well grounded, that this embarrassment is but temporary.

* * * * *

ACCURACY OF FIRE.

In firing two series of five shots each at a target 3,000 yards distant to determine which of two different forcing bands submitted for trial, was of the better width, the following results were obtained with the band adopted—

Target 30 by 40 feet—range 3,000 yards.

	Feet.
Mean vertical deviation from center of impact.....	1.90
Mean horizontal deviation from center of impact	1.56
Mean deviation from center of impact.....	2.46

or the centers of all the shot-holes were contained within a circle of $6\frac{1}{2}$ feet diameter, which denotes a very high degree of accuracy.

The Du Pont brown prismatic powder has given a muzzle velocity of 1,820 feet, with a pressure of 35,450 pounds per square inch, using a charge of 100 pounds and a projectile of 286 pounds, and although this result is quite satisfactory, as compared with results obtained abroad, yet it is thought that some improvement may still be made. Some further samples have accordingly been ordered for trial. The firing of the experimental 8-inch steel rifle has enabled the Department to settle through its own experiments and with a minimum cost the recently vexed question as to whether or not the modern steel guns of this caliber should be hooped to the muzzle. The question came into prominence in Europe after the manufacture of this gun had been commenced, and was raised by the bursting of several foreign guns having no hoops over the chase. The remedy generally adopted abroad has been to hoop the gun throughout. The principal objections to this are the increased weight and cost of manufacture. In the 8-inch gun the Department possessed a tube

the tests of which at the muzzle showed exceptionally fine quality of metal, and was of such dimensions as to give abundant strength for anticipated pressures. Instead then of changing the design of the gun to conform to foreign methods the Department determined to settle the question for itself. The gun was provisionally finished without the chase hooping, sent to the proving ground and fired with heavy charges. The most careful attention has been paid to enlargements of the bore within the unhooped portion of the chase. During the firing of the twenty-four rounds the bore was star gauged after the first, fourth, seventh, thirteenth, twenty-third and twenty-fourth rounds. Even after the thirteenth round the maximum enlargement in the unhooped chase was but $\frac{1}{1000}$ of an inch. After the twenty-fourth round for about 12 inches in the length of the bore near the muzzle the enlargement was $\frac{1}{1000}$ of an inch. This enlargement is in itself small, showing an extension of only $\frac{1}{1000}$ of an inch, per linear inch, or less than one-half of one per cent. of the ultimate extensibility of the metal after rupture, as determined by tests of bars cut from the tube forging itself. A careful consideration of the results, however, led to the conclusion that the chase should be hooped to the muzzle, having also in view the purpose of the Testing Board to fire the gun to extremity. This modification in the design will permit, with a suitable powder adapted to a high density of loading, of increasing the present powder charge, if desired, and will enable the Department fully to develop the ballistic properties for guns of this class. The gun has been returned to the West Point Foundry, where it is now in the lathe being turned for its chase hooping.* It is expected that the trial will be renewed in about two months.

This 8-inch gun is made largely of imported steel. The first forgings imported were rejected as not up to our standard of what the metal should be. The machining of the steel and fashioning of the gun, was done in this country. The technical work, such as determining the specifications, and the details of the construction, the shrinkages, &c., and the daily supervision and inspection, was the exclusive work of ordnance officers. In the manufacture of high-power steel guns such as these no rule of thumb methods can be followed. Scientific study, and technical skill and devoted attention to the work can alone reach successful results. The few rounds already fired prove that the work was well done, and gives us every reason to believe that the qualities of steel required for guns and the manufacture of guns can be intrusted with entire confidence to the officers of this Department.

I may here remark, that, owing to the failure of the fortifications bill, and the consequent inability of the Department to procure new supplies of powder, it would have been impracticable to test this new 8-inch gun after its completion, except for the fact that the Department had an existing contract with the Messrs. Du Pont for a supply of brown powder.

Production of steel gun forgings.

The Midvale Steel Company, has completed its contract for the delivery of twenty-five sets of forgings for 3.2 inch B. L. field guns. The steel furnished has been of a superior quality, exceeding the requirements of the contract. These works have also completed all the parts for the

* Since writing the above the chase of the 8-inch rifle has been turned down for the reception of its hoops, and after removing the necessary metal on the exterior it was ascertained that the bore had undergone considerable restoration, which has materially reduced the above-noted enlargement. This fact points to the existence of initial strains in the original tube, due probably to faulty treatment in its manufacture, and which, acting in the same direction as the powder strains, caused an enlargement of the bore such as was not to be expected from the action of the powder alone.

8-inch B. L. siege gun, excepting the jacket, and that will be delivered in November. A tube and trunnion hoop for an 8-inch B. L. rifle have also been successfully forged and accepted. The production of the 8-inch rifle jacket has been attended with considerable difficulty, and a number of failures have been experienced, this being the largest gun forging thus far undertaken at Nicetown. But the last attempt has, there is reason to believe, proved entirely successful, and the manufacturers have gained in compensation for their failures most valuable practical knowledge of how to deal with large forgings, and thus have broken fresh ground in the development of the steel industry.

Prior to ordering the trunnion hoop for the 8-inch gun, as the production of a forged steel trunnion hoop—at least of any considerable size—had not hitherto been accomplished in this country, and as it was very desirable to know accurately the mechanical qualities of such a forging, the Department procured from the Midvale Steel Company, for purposes of test, a forged trunnion hoop of about the same size as that required for the 8-inch rifle. When completed this trunnion hoop was sent to the West Point Foundry, where it was cut in half along a plane passing through the axis of the trunnions and perpendicular to the axis of the hoop. One of the halves was then subjected to thorough mechanical test by means of test specimens taken from various parts along the inner face, while the other half was subjected first to an elastic, and then to a strength test by being shrunk successively on two cast-iron cylinders. The results by both methods of test were satisfactory and demonstrated the ability of the Midvale Steel Company, to cope with these difficult forgings. Following are some results obtained from the 8-inch tube and trunnion hoop. The test specimens were taken tangentially, those from the tube being 3 inches long and of .564 of an inch diameter, and those from the trunnion hoop 6 inches long and of .564 of an inch diameter:

8-INCH TUBE—TENSILE TESTS.

	Elastic limit.	Tensile strength.	Elonga- tion after rupture.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Per cent.</i>
Breech end :			
Outside	51,000	90,400	20.00
Middle	46,000	86,200	21.00
Inside.....	49,000	86,840	23.83
Means	48,667	87,813	21.44
Muzzle end :			
Outside	52,000	94,000	19.67
Middle	50,000	91,600	21.88
Inside.....	53,000	94,320	17.00
Means	51,667	93,333	19.33

8-INCH EXPERIMENTAL TRUNNION HOOP—TENSILE TESTS.

	Elastic limit.	Tensile strength.	Elonga- tion after rupture.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Per cent.</i>
Outer end, A :			
Minimum	49,000	89,600	17.67
Maximum.....	57,000	93,920	22.17
Average	53,750	91,890	19.25
Center, C :			
Minimum	45,000	80,760	16.50
Maximum.....	56,000	91,960	19.38
Average	48,300	86,652	17.81
Outer end, B :			
Minimum	44,000	87,000	14.50
Maximum.....	48,000	89,000	20.30
Average	46,250	88,090	18.04

The results from the shrinkage tests of the trunnion hoop showed that, whilst the hoop was weakest in the vicinity of the trunnions, the hoop as a whole was adapted to purposes of gun construction, yet that due care must be exercised in the determination of the shrinkage to be employed, as an excessive shrinkage would tend to develop a set in the trunnion masses when the gun is fired. A full report on this experimental trunnion hoop, showing the locations of the test specimens and describing the tests, and giving the conclusions to be drawn from them, is contained in Appendix 26. Since the manufacture of the experimental trunnion hoop the Midvale Steel Company, has delivered the 8-inch rifle forged trunnion hoop, and a similar hoop for the 12 inch B. L. mortar, the end tests of which are nearly equal to those from cylindrical hoops. For full report of the operations at these works during the past year, see Appendix 23.

At the Cambria Iron Works the Department has had a lot of twenty steel hoops under manufacture since September 15, 1885. In this, their first attempt at the production of steel gun forgings, the Cambria Works have encountered many obstacles, particularly so as the hoops are of considerable size and the specified qualities for the metal very high. But they are steadily completing their contract and fully meeting its requirements in spite of difficulties. A good part of the hoops have been delivered, and the remainder are in a forward state of completion. This establishment has also in hand for the Department a set of forgings for a 7 inch B. L. rifled howitzer, which will give them an opportunity for acquiring experience in the production of steel tubes and forged trunnion hoops. A full report of the operations at the Cambria Works during the past year, with an exhibit of the results obtained from the 10-inch rifle hoops is given in Appendix 24.

The status of the steel works which have thus far undertaken the production of gun steel is to day about as follows: There is *one* establishment able, with present facilities, to produce all the forgings, and of the required qualities, for a steel gun of 8 inches caliber, and hoops of all sizes except the very largest and heaviest, and the breech mechanism and smaller forgings for all calibers. There are *two* establishments now able to produce the tubes and jackets and miscellaneous forgings for guns of small caliber and hoops of a very considerable size.

This represents the best that can be done to day by the steel works of this country, and in some respects their experience is yet so new and the extent of their plant and facilities so limited that a great deal of time is requisite for the production of the forgings. The orders from the Department have also been very limited, but with the prospect of a larger demand there is but little doubt that the works with which the Department has had dealings will respond with all needed alacrity in providing the necessary facilities for promptly executing its work. It is thought that these manufacturers could commence delivering the heavier forgings, say for a 10-inch rifle, from eighteen months to two years after date of contract, but the production of such forgings would for several years be slow, as the manufacturers would wish to feel sure of their ground before assuming the risk of a number of possible rejections. The production of the tube and jacket forgings for 12-inch guns could be accomplished in from two and one-half to three years. Then the time for finishing and assembling the parts—that is the manufacturing of the gun—must be added to the above in making any estimate on the procurement of armament. In this connection I quote from my

last annual report the following remarks, which are quite as much in point now as at the date when written :

Should Congress make a sufficient appropriation to enable this Department to advertise for the forgings, say for 100 of these 10-inch steel rifles, it is quite certain that some of our steel manufacturers would provide the requisite press for the production of forgings, with the oil tanks, and annealing furnaces for their treatment, in about a year; and that they would begin to deliver the rough-finished forgings within six months afterwards, or say eighteen months after date of contract. It is even safe to say that they should so design the new plant that it should possess sufficient capacity for the production of the forgings required for 12-inch steel guns; thus in the near future would our own steel makers be placed on a footing to supply the forgings for guns of a power far in excess of anything we can hope to obtain from the use of cast iron alone. Liberal appropriations by Congress, to extend over a number of years, for the manufacture of 8, 10, and 12 inch steel rifles, and ultimately of 16-inch and higher calibers, would, it is believed, prove the truest policy for the development of our own resources, and the surest for placing our extended coast in a proper state of defense.

With regard to the best method of developing our steel manufacture, the opinion of the House Commission on Ordnance and Gunnery, of which Hon. S. J. Randall was chairman, as expressed in their report submitted last session, was as follows :

It would be more in the line of prudence, economy and efficiency in the guns we are to obtain, to proceed carefully to make smaller guns, and work up gradually to the larger ones, than to suddenly appropriate for the latter before we even know that the smaller can be made; and the commission have no hesitation in recommending that all guns for use by the Army and Navy, including those for fortifications, when constructed, should be constructed in the United States.

The question of making gun steel even in small masses, is a delicate and difficult operation. It therefore seems that the best course to pursue is to confine ourselves at present to guns of from 8 to 12 inch caliber.

By this means workmen, foremen, corporations, and ordnance officers will be educated, and a body of data accumulated that ought to result in improved and more economical processes, and enable them to construct larger guns, which will not only be more efficient, but will remove the element of uncertainty from the question of what is sufficient remuneration.

Such a policy of development, as above indicated, is believed to be a sound one. It is considered a mistake to expect steel makers to put up at the outset the plant and facilities requisite for the manufacture of the very largest forgings, such for instance as those used in the construction of 100-ton guns. The requisite machinery for the production of even the smaller forgings will be to a considerable extent *experimental* with our manufacturers, and must be gradually developed, along with our types of guns, until the experience acquired in the manufacture of the smaller forgings, as 8-inch, 10-inch, and 12-inch, shall clearly indicate the best methods to be pursued in producing the largest forgings. Such gradual development will prove sure and economical, and the *ultimatum*—the production of the forgings for 100-ton guns—will be attained quite as speedily, and with more certainty and satisfaction, than by the scheme of a sudden and enormous expansion of their manufacturing facilities.

* * * * *

STEEL FIELD GUNS.

After the satisfactory results obtained with the experimental steel 3.2-inch B. L. rifle, the Department, last year, contracted with the Midvale Steel Company for the delivery of complete sets of forgings for twenty-five similar guns. Five of the guns were placed under manufacture at the Watertown Arsenal, and the remainder were awarded to the West Point Foundry Association, they being the lowest bidders for the work. It was expected that these guns would be com-

pleted by the early spring, but delay in the delivery of the forgings has occasioned a like delay in completing the guns. A number of the guns are, however, already finished, and it is expected that the whole lot will be completed by the end of November. The experimental metal field carriage made for these 3.2-inch guns failed on trial, owing, it is believed, in part to defective metal, and in part to some defect in workmanship, or to structural weakness. A new carriage is, however, about completed, and will be subjected to trial as soon as received at the Proving Ground.*

FIELD GUN CARRIAGES.

The Department in its annual estimates for this year, has asked for a liberal appropriation for the construction of field gun carriages. It has on hand about 500 serviceable 3-inch wrought iron M. L. rifles, and has also to provide carriages for the new steel guns. The old wooden carriages, made years since for the wrought iron guns, have so deteriorated, notwithstanding the repairs made upon them from time to time, that at present it may be said that we have no serviceable carriages for issue with those guns. The metal carriages designed for the new steel guns will serve for the wrought iron guns as well, and the wrought iron can be replaced by the steel guns as the manufacture of the latter progresses. An alternative policy would be the reconstruction of a number of wooden carriages but such carriages would be useless for the service of the new guns, and would become obsolete so soon as the old guns were replaced by the new. The needs of the service in respect to a supply of carriages for the field artillery are most pressing and the appropriation asked for is earnestly recommended.

* * * * *

I have the honor to be, very respectfully, your obedient servant,

S. V. BENÉT,

Brigadier-General, Chief of Ordnance.

To the honorable SECRETARY OF WAR.

* Since writing the above the new field carriage has been received at the Proving Ground and subjected to a most satisfactory test. The carriage is of simple, not compound construction, and is made of mild steel,—the cheek plates being double, with curved flanges above and below. It is fitted with the spring brakes for checking recoil and the flanged axle for securing stiffness that have been already successfully tested in a previous carriage. The new carriage weighs only 1,300 pounds, and is graceful in its outlines. It was tested by firing 500 rounds from the 3.2-inch steel field gun, of less than 800 pounds weight, using charges of $3\frac{1}{2}$ pounds, with a projectile of 13 pounds, having a velocity of over 1,700 feet. During the firing, the carriage rested on elastic planks, in heavy sand, and various angles of elevation up to the maximum were used, and charges that gave over 35,000 pounds pressure per square inch of chamber, and it has come out of this severe ordeal in almost perfect condition.

This carriage, with its accessories, was designed by Lieut. Col. Bullington, of the Ordnance Department, and the Department has now placed the manufacture of the 25 carriages for issue with the new steel field guns, in Colonel Bullington's hands, at the National Armory.

REPORT OF PUBLICATION OF WAR RECORDS.

WAR DEPARTMENT,
PUBLICATION OFFICE, WAR RECORDS 1861-'65,
Washington, D. C., October 9, 1886.

SIR: I have the honor to report the progress made since October 10, 1885, in the publication of the Official Records of the War of the Rebellion.

Of Series I, Volumes XIV, XV, and XVI (in two parts), and Part I of Volume XVII (in all five books), have been issued, and the index of Part II, Volume XVII, is completed and in type. This part of Volume XVII and Volume XVIII will probably be issued by December 1 next. The text of Part II, Volume XXII, of Volume XXIII (in two parts), and of the first two parts of Volume XXIV has been stereotyped; and the third part of that volume and Volume XXV (in two parts) is in the hands of the Public Printer. The text of the Supplement to Volume XII (the record of the Fitz-John Porter court-martial, called for by the act of July 31, last) has been stereotyped and indexed, and will probably be issued before Congress reassembles. The manuscript of Volumes XXXI, XXXII, and XXXIII is arranged for the printer, but Volume XXX is yet incomplete.

The act approved August 7, 1882, which went into effect after the first five volumes of the records had been published, contemplated a completion of the sets to be issued under that law. For that purpose an estimate has been submitted for reprinting and binding 6,000 copies each of Volumes I to V.

The expenditures on account of printing, binding, &c., since October 10, 1885, are as follows:

For composition, stereotyping, &c., of volumes still in the hands of the printer—	
Volume XXII, Part II	\$2,224 40
Volume XXIII, Part I	1,771 15
Part II	1,990 60
Volume XXIV, Part I	1,745 15
Part II	1,433 95
Part III	798 90
Volume XII (Supplement)	240 00
To complete—	
Volume XIV	6,958 05
Volume XV	7,924 41
Volume XVI, Part I	7,683 26
Part II	6,603 09
Volume XVII, Part I	5,742 49
	<hr/>
	45,115 45

RECAPITULATION.

Balance available as per last report	\$42,699 87
Appropriation for fiscal year ending June 30, 1887	36,000 00
	<hr/>
Total	78,699 87
Expenditures	45,115 45
	<hr/>
Available October 10, 1886	33,584 42

The expenditures for salaries and rent made under the immediate supervision of this office during the fiscal year ending June 30, 1885, have been as follows:

Salaries	\$31,364 04
Rent	1,200 00

Fuel, lights, stationery, and all other incidental expenses have been provided by the Supply Division of the War Department.

I respectfully invite attention to my recommendation accompanying estimate for fiscal year ending June 30, 1888, for \$600 additional compensation to the clerk of Class IV engaged in preparing the general index. This work is of the most important and responsible nature, and requires the services of a person of experience and special ability. The compensation now allowed (\$1,800) is inadequate for the service performed.

Very respectfully, your obedient servant,
ROBERT N. SCOTT,
Lieutenant-Colonel Third Artillery, in Charge.

The SECRETARY OF WAR.

**REPORT OF BOARD OF COMMISSIONERS OF THE
SOLDIERS' HOME.**

**OFFICE, BOARD OF COMMISSIONERS
OF THE SOLDIERS' HOME,
Washington, D. C., October 23, 1886.**

SIR: In compliance with section 1 of the act of Congress approved March 3, 1883, "prescribing regulations for the Soldiers' Home," I have the honor to submit the following, which has been adopted by the Commissioners of the Home as their report for the year ending September 30, 1886:

Regular meetings of the Board have been held every month for the transaction of business pertaining to the affairs of the Home, and the consideration of applications for admission or readmission, for transportation, and for "out-door relief." Visits of inspection have also been made to the Home once in each month.

Number of persons receiving the benefits of the Home, as regular inmates or members, September 30, 1885	785	
Admitted and readmitted	310	
	<hr/>	1,095
Discharged on their own request	93	
Suspended	30	
Dropped for absence without leave, and from "out-door relief"	28	
Dismissed	5	
Abandoned the Home	4	
Died	41	
	<hr/>	201
Receiving the benefits, September 30, 1886		894

There have been 197 temporary admissions during the year, nearly all for the purpose of awaiting the examination of their cases for regular admission. The record of service and disability in each case of an applicant for admission or readmission is considered by the Commissioners at a regular meeting. The number of temporary inmates in the Home September 30, 1886, was 52; making the total number receiving the benefits on that date 946. The number of names added to the register during the year by regular admission and for "out-door relief" was 208, which is fourteen more than any other year since the establishment of the Home. Two hundred and thirty-one of the members are allowed to make their residence elsewhere, generally with their families or friends, and are paid from the Home funds an allowance (termed "out-door relief" or "commutation") not exceeding \$8 per month. This commutation list was increased during the past year by 47 names, and the arrange-

ment has been encouraged by the Commissioners, because the accommodations at the Home for resident inmates are so limited.

A very large amount of money remains due to the Home from the old unsettled accounts in the Treasury Department. This money, together with the amount now in the "permanent fund" and in bonds, must form the reserve fund and afford an interest revenue, which, with the income from settlement of current accounts, must provide the means to maintain the Home in the future. Every encroachment upon this reserve is a matter of serious consequence. The current income, apart from the interest upon the reserve fund, appears to be diminishing. This income is the deduction of $12\frac{1}{2}$ cents per month from the pay of each soldier, and the stoppages, fines, and forfeitures coming from month to month upon the accounts of the Pay Department of the Army. The settlement of these accounts during the past three years shows the alarming diminution referred to. In 1884 the amount derived was \$128,026.65; in 1885, \$122,528.91, while in the last year the amount was \$87,704.34, a decrease of \$37,573.44 from the average of the two preceding years. The Commissioners are unable to explain why this should be so, and inasmuch as the Army has been no smaller, and the amount of pay no less, it is hardly supposable that the causes which create the source of this income have so greatly abated as to make such a difference as has actually occurred. It must therefore be attributed to the settlements in the Treasury Department being less in number or of accounts covering shorter periods or fewer payments to the Army. Whatever it may be, the fact remains that, in order to maintain the Home during the year, the current income had to be supplemented by a little more than \$47,000 from the reserve fund. It is a matter of very little consequence how current accounts may be settled, provided the work proceeds uninterruptedly as rapidly as it accumulates, but there seems to be room for improvement in existing methods, and if there could be brought about a mutual agreement and arrangement between the Pay Department of the Army and the accounting officers of the Treasury Department, it might be possible for the former to ascertain and certify the amounts due the Home before the accounts pass to the latter for final settlement. Such arrangement would appear to insure regularity at least, and if it shall be found upon further consideration to have any promise of feasibility, some recommendations upon the subject may be submitted hereafter.

The treasurer's accounts show that there remained in his hands September 30, 1885, \$23,531.17, and that he received the following sums during the year: From the "permanent fund," upon requisitions by the Commissioners, \$136,020; interest, \$55,718.65; rent of property at Harrodsburg, Ky., and miscellaneous sources, \$2,555.14; effects of deceased inmates, \$482.38; total to be accounted for, \$218,307.34. Of this sum there was expended for the Home, for the purposes shown in the treasurer's statement, herewith, \$192,920.88, and \$1,000 (which was received for property taken by the United States in connection with the extension of the water supply for Washington City) was deposited in the permanent fund, leaving a balance in the treasurer's hands September 30, 1886, of \$24,386.46. It is the regular practice to draw from the United States Treasury the funds required for the expenses of each month only a few days before its close.

The "permanent fund" account in the United States Treasury showed a balance to its credit September 30, 1885, of \$445,182.90. The amount placed to the credit of the same fund during the year was \$219,601.11, making a total of \$664,784.01. The amount withdrawn for the use of

the Home was \$136,020, leaving a balance September 30, 1886, of \$528,764.01, a net increase of \$383,581.11. This fund bears interest at 3 per cent. per annua, which is paid to the treasurer of the Home quarterly, and forms a part of the current income. The payments received during the year amounted to \$14,318.65, and were for the year ending June 30, 1886. The interest for the quarter ending September 30, 1886, amounting to \$1,018.49, was under certificate, but had not been paid to the treasurer at the date of his report. The balance of the income reported by the treasurer as interest received is made up by interest for fifteen months on \$750,000 United States 4 per cent. bonds (\$30,000) and interest for one year on \$10,000 Missouri Pacific 6 per cent. bonds (\$2,000), making, with the \$14,318.65 above mentioned, a total of \$55,718.65.

Exhibits with the report of the treasurer show that the value of the farm and dairy products, estimated at regular market prices, exceeded the expenses of these departments, making a profit to the Home of \$4,806.66, while the account with the garden, against which is charged the expense of keeping the ornamental part of the grounds in order, shows a balance against that department of \$1,647.99.

The account with the inmate pensioners, which is a trust imposed by law upon the treasurer of the Home, shows that the amount received by him during the year was \$47,383.57, and that the amount paid by him to the individual pensioners was \$16,534.83. The Commissioners have heretofore expressed their views upon the payment of large pensions by the General Government to men who have all their wants supplied from the funds of the Soldiers' Home, and deem it futile to make any further endeavor to secure a modification of existing law regulating the subject, but it should be remarked that a sum of money almost equal to one-fourth of the expenses of the Home is not only paid to inmates, the most of whom have very little profitable use for it, but an officer of the Home is obliged to become the custodian of the funds, and perform a great amount of labor in keeping an individual account with each pensioner, to whom payments must be made frequently and in small amounts.

No building operations were carried on during the year and no real estate was purchased. In January, 1886, the Secretary of War approved a request of the Commissioners for authority to purchase from the Rock Creek parish a piece of ground containing a little less than one fourth of an acre, which some years ago had been inclosed with the Home grounds by a permanent stone and iron fence, built along the road which separated this small piece from the main property. The parish is not yet ready to receive the purchase money, and it remains subject to their order. In the last report of the Commissioners it was stated that a balance of \$9,935.56 was due the contractors who built the new annex building, then just completed and occupied. The contractors made a claim prior to final settlement for a considerable sum for extra work upon the building not included in the contract. This claim was duly investigated, and, as a result, an award of \$500 was made by the Commissioners, and, with the balance due on the contract, has been paid.

Still further space for cooking and messing, as well as for dormitories, is demanded by the increased number of inmates, and plans have been adopted and are now being prepared, with estimates, for a large extension to the main building, which it is expected will cost about \$150,000.

At their last monthly meeting the Commissioners authorized the governor of the Home to place inmates in the building which has heretofore been reserved as a summer residence for the President of the United

States. It had become absolutely necessary to so occupy it in order to relieve other overcrowded quarters.

The Commissioners desire to call special attention to a matter of regular expense to the Home in maintaining a large and handsome park and an exceedingly well-planned system of beautiful drives, and to urge that a strong appeal be made to Congress for some measure of relief by an appropriation to keep up the repairs to road-beds, bridges, culverts, gutters, &c., for about 10 miles length of drives within the Home grounds. In the effort to make these extensive grounds attractive, a park has been formed, which has become a necessity, as a resort not only for the people of Washington City, but for the multitude of strangers who visit the national capital. It is the only park or place accessible to this city affording suitable conditions for riding or driving for pleasure, and the people who seek this enjoyment are not influenced through any interest whatever in promoting the happiness of the old soldiers whose money, accumulated from such apparently insignificant contributions as 12½ cents per month, has provided so convenient and inviting a place for healthful recreation. It is true that the grounds might be closed and the use of the roads prohibited, but it would manifestly be an unwise thing to do, as it would not only be a great deprivation to the people of Washington City, and in a measure to the people of the whole country, but it would result in a waste of property and impairment of the improvements which could hardly be justified.

The expense of keeping up these drives is burdensome to the Home, and ought not by any means to be longer imposed on its overtaxed income. There can be no doubt of the propriety of seeking and obtaining an appropriation from the public Treasury to meet the expense. Its use in maintaining a public privilege of the most acceptable kind is abundant reason for granting it. The form in which it shall be made and the channel through which it shall be applied may be left for consideration at the time of legislation, when more particular information can be given with respect to the amount of money required and the special uses to be made of it.

The Home continues to hold its property at Harrodsburg, Ky., and has kept it under lease at a rent of \$600 per annum. Early in the past summer a complaint that a pond upon the property was a source of disease affecting the inhabitants of the town close by, was received by the Commissioners, and upon their request a medical officer of the Army was ordered to inspect the place and report upon its sanitary condition. His report showed that the part of the town which would be most exposed to any contaminating influence from the pond had been quite free from that type of disease supposed to have its origin in impure water or pools and swamps, and the Commissioners decided that they would not be justified in incurring the expense necessary to abolish the pond. The property itself is for sale, and if at any time an offer shall be received of a sum sufficient to yield at 3 per cent. per annum an amount equal to the present rent, the Commissioners will no doubt deem it their duty to make a sale at public auction under the terms of the law which gives them authority to do so after advertisement. The property has been once so offered, but no bid equal to the minimum price was received, and it was withdrawn.

The stock of the Young Men's Christian Association Joint Stock Company, in which the Home has \$62,500 invested, has not yet acquired a market value. There is a debt of \$33,000 upon the property which will become due in June, 1889, and if the company shall be able to continue until then to increase their sinking fund at the average rate of the past

few years, there will be about half enough money on hand to pay the debt. A new loan for the balance at a lower rate of interest will no doubt be obtained, and the whole indebtedness may be paid in five or six years more. The law of Congress authorizing the loan requires the debt to be paid before any dividend can be declared for the stockholders. The papers accompanying this report are the annual report of the governor of the Home, treating of the internal affairs of the institution; the report of the treasurer, accompanied by six financial statements; the report of the attending surgeon, and a list of names of 208 men admitted to the Home during the year for which this report is made. Sixteen of these men are soldiers on the retired list, 53 are discharged soldiers who have served twenty years or more as enlisted men in the Army, and 139 discharged soldiers who have served less than twenty years, but who have been found to be entitled to the benefits of the Home by reason of disability incurred in the line of military duty of such degree as to disqualify them for further service.

The roster of officers at the Home remains as it was given in the last annual report, and no change has occurred in the Board of Commissioners except the retirement of the Surgeon-General of the Army August 6, 1886.

I am, sir, very respectfully, your obedient servant,

P. H. SHERIDAN,
*Lieutenant-General Commanding the Army,
President Board of Commissioners.*

The SECRETARY OF WAR.

REPORT OF THE BOARD OF VISITORS TO THE UNITED STATES MILITARY ACADEMY.

* * * * *

REPORT.

The object and purposes of the establishment of the United States Military Academy are too well known to require reference at this time. Its conception originated in the wise and thoughtful mind of George Washington, and it has been fostered with almost religious care from its foundation to the present time. The fortunate selection of the historic spot it occupies for its location has largely influenced its success, since no spot so isolated and yet so accessible could possibly be found possessing at the same time the advantages of a close connection with the "outside world."

It is, by virtue of its topographical position, so entirely removed from the realms of commerce and trade and of population that no extraneous influence can be brought to bear to disturb its quiet seclusion as a place of study or mar the effect of its enforced discipline.

In pursuing its investigations the Board, having in view the practical value of the institution to the country and its economical administration, deemed it necessary to ascertain—

1. If the discipline exercised on the cadets is in accordance with justice and humanity, and if its effects upon the individual results in developing and maintaining a high tone of morality and manhood.

2. If the course of instruction is in keeping with the advancement of knowledge, and especially if the improvements occurring all over the world in the art and science of war are recognized and taught.

3. Whether the system adopted for the conduct of the fiscal affairs of the institution is calculated to secure the best results through a judicious and economical expenditure of the moneys appropriated for that purpose.

METHODS OF APPOINTMENT OF CADETS AND THE RESULTS.

There are allowed by law, through the nomination of members of Congress, one cadet for each Congressional district and ten appointments by the President, making the legal number at present 344 cadets. There are now at the Academy only 269 cadets, arranged in classes as follows :

First class	77
Second class	67
Third class	51
Fourth class	74
Total	269

This shows a deficiency in the maximum number allowed of 75 cadets; that is to say, there are 75 vacancies in the corps as now organized. When the present first class graduates, on the 12th instant, there will be 77 more vacancies, making 152 in all. To fill these vacancies 136 candidates for admission have been named, which will still leave 16 vacancies, even should all of those who present themselves for admission pass both the physical and mental preliminary examinations, while experience has shown that at least 24 per cent. fail. To supply the possible failure of some of these, 31 alternates have been appointed to be examined in case the principal appointee in the particular district from which they are appointed should fail. These alternates will have the effect to reduce the percentage of failure in the preliminary examination, but there will, in all probability, remain from 34 to 40 vacancies in this class when it begins the academic year. Adding to this about 50 per cent. who fall out of every class between the time of entering and graduating, there would be left a large and increasing diminution in the strength of the corps during each year. It was probably in view of this fact, among others, that Congress, by a law since repealed, authorized the President to appoint ten cadets "at large" each year. This authority is now limited to ten appointments of this character in four years.

Recognizing the fact that the pay of an individual cadet is small compared with the total expenses of the Academy, the Board consider that it would be an act of sound public policy to give to the President the authority to appoint ten cadets each year, not only as a means of maintaining the strength of the corps, but also of providing for many deserving young men who can in no other way secure admittance to the Academy.

It was probably intended by conferring this power upon the President to afford an opportunity for the appointment of sons of officers of the Army, who, by reason of their duties, had no permanent residence in any Congressional district, and by a natural sequence the sons of those who served in the last war as "volunteers" have had their claims recognized in the number appointed by the President. The applicants for these appointments are very numerous, and the solicitations very pressing. If this number should be still further increased, by authorizing each United States Senator to name a cadet, it is believed that there

would be still (through incidental circumstances) an average number of cadets less than the total number allowed by law.

The great value to the "country at large" of the technical education acquired at West Point, unlike in its theory and practice to that of any other institution, cannot be overestimated.

So impressed was General Grant, after his very extraordinary experience as the head of the great Armies of the Republic with the value of the United States Military Academy to the nation, that he asserted as his firm conviction, as a matter of public policy, that the number of cadets should be increased to one thousand, from which an annual selection should be made of those required for military service, while the remainder of those graduating each year and not required for public service would, by being disseminated throughout the country, add to the ranks of the people men of scientific attainments for the arts in peace and "ready-soldiers" in the event of war.

The fact that the average number of vacancies in the Army list exceeds the number of graduates is an additional reason why the range of appointments should be extended.

Below will be found a table prepared by Lieutenant Simpson, showing the number of casualties making, directly or indirectly, vacancies in the Army which graduates of the Military Academy may be assigned to fill, and the number of such graduates for the last fourteen years. The table does not cover a longer period, because, in 1871 there was a considerable reduction in the number of regiments in the Army, and its strength since has been nearly uniform.

The number of casualties, taken from the official Army Registers, has been obtained as follows:

First. By counting the actual number of casualties in the Corps of Engineers and Line of the Army, and in those Staff Departments (Adjutant-General's, Inspector-General's, and Ordnance) in which vacancies are filled by appointment from the line; and excluding the Signal Corps, and the Medical, Quartermaster, Subsistence, and Pay Departments, as vacancies in these either cannot or need not be filled by appointment from the line. In cases where vacancies in the latter have been filled from the line, such vacancies have been counted.

Second. By counting the casualties on the retired list. As there are always more subjects for retirement than places for them on the list every vacancy on this list is soon filled by taking an officer from the active list. The retired list is open to the whole Army. The number of officers, vacancies among whom would cause vacancies among the second lieutenants of the Line or Corps of Engineers, is 1,830. The number of vacancies where this would not be the case is 380. The proportion is, therefore, about 4.8 to 1. Supposing that retirement is equal in the different branches of the service, 48 officers of the former class go upon the retired list to 10 of the latter, and therefore $\frac{48}{10}$ of the casualties on the retired list give rise to vacancies open to graduates, non-commissioned officers, and appointees from civil life.

* * * * *

INSTRUCTION OF THE CADETS.

There are three elements that enter into the consideration of the matter of instruction. These are (1) the subjects taught; (2) the text-books used; (3) the methods pursued.

In discussing the subjects taught we are met at the threshold with the fact that this is a purely technical school established and maintained by the Government for the sole purpose of instructing a certain

number of young men free of charge in the art and science of war in order to fit them for military service. All considerations outside of this main idea are foreign to the question, and the Board has therefore only to determine whether the system adopted leads up in the most direct and practical manner to the result desired. In the first place it is clearly manifest that mathematics constitutes the groundwork and is the principal element of the entire four years' course. There are obvious reasons why this should be the case. Mathematics forms the basis of the exact sciences, and while the mere study of mathematics independent of their application is in itself a mental discipline regarded by a large number of educators as the best calculated to strengthen and develop the mental faculties, they contain at the same time those elements of fact and deduction upon which the higher branches of scientific study depend for their elucidation. In the art of war science is supreme. Exact science has brought it with the aid of invention to its present wonderful condition of development. The genius of man has reached to its supremest heights in the construction and use of the appliances of modern warfare. The barbaric methods by which the great captains of history and conquerors of the world attained their renown are now as impotent and obsolete as the bows and arrows of the Parthians or the war clubs of the Sandwich Islander. Pure and unadulterated science founded on mathematical exactness has replaced all other methods, and out of scientific thought and scientific experiments have been evolved those titanic guns and terrible explosives with which the nations of the earth now confront each other, and yet such is the intense activity of invention displayed throughout the world that a single year or a single month may exhibit an entirely new phase of the whole subject and develop new methods of attack or defense hitherto unthought of.

The system of instruction and the course of studies is in charge of eight professors, whose positions at the Academy are permanent (with the exception of that of the department of law), eight assistant professors, who are officers of the Army, and liable to a change of detail generally every four years, thirty-eight instructors and assistant instructors, who also are officers of the Army, and liable to change of detail every four years.

* * * * *

The questions as to what text-books should be used in the instruction of the several classes is one of very great importance. These are decided upon by the Academic Board, and it may be asked, under the circumstances, if they alone are the best judges. The professors are greatly embarrassed in this particular by the desire on the part of each of them to make his own particular branch as thorough and complete as possible, and each endeavors to secure the most time for his special course. Nothing is more palpable than the fact that four years is not sufficient to impart all that the cadet ought to know. The exact sciences are not only the result of the accumulated thought and study of all the ages, but the present age is ripe with new and ever-increasing problems, all valuable, and a knowledge of them is for the most part a necessity to a scientific course. Just how to condense this information into a limited period of study, just where to leave off, are difficult questions to decide.

All this was made clearly apparent to the Board of Visitors at every step of their investigation. They would gladly, in this report, aid the Government with their suggestions in this most difficult problem, if it

were possible to do so. A single glance at the range of studies which forms the curriculum of the Academy is sufficient to show the embarrassment in the way. There is one fact, however, no less apparent to the Academic Board than to the Board of Visitors, and that is the necessity for remodeling the course in practical engineering. The text-books in use are not up to the knowledge of the day, nor do they grasp the subject-matter with the force that is required.

The cadet enters the first class, at the end of the third year, with his mind trained by three years of close study of abstract mathematics, and the last year's course should open to him a field for thought and observation outside of technical details. To this end it is believed that more time should be devoted by the professor to oral instruction and the stimulation of thought—the calling out, as it were, from the cadet of his latent faculties by free discussion outside of the text-book. In fact, if one day in each week (say Saturday) were devoted by each instructor in the section-room, in all the classes, to going over in advance the lessons of the week to come, the cadets would be materially aided in their efforts to grasp the problems before them. This course was pursued by one instructor some years ago, with such success that his section has not ceased to cherish the remembrances of his services to them to this day. The Board deems this matter worthy of careful consideration.

As the time of the professor of engineering is necessarily closely occupied with his duties during the whole academic term, it is suggested that an officer of engineers, experienced in field operations and especially qualified by thought and study for such duty, be detailed for duty at the Academy, to aid the professor of engineering in revising the course. It is believed that this would be the most expeditious and practical way of accomplishing what is imperatively needed—a better knowledge of the advanced condition of the art of war. And this should be done periodically, for the reason that text-books on this subject, having necessarily a limited circulation, are rare books, published only at long intervals, and are seldom in accord with the times in the information they contain.

Another feature of the present method of instruction seems to call for some remark. With the exception of the regular professors, eight in number, the whole corps of teachers, nearly fifty in all, are on temporary duty at the Academy, subject to constant change of detail. They are all officers belonging to the different arms of the service, ordered to duty at the Academy, sometimes by selection, sometimes at their personal request, and sometimes against their wishes. Most of them have been proficient while cadets in the several branches to which they are detailed as instructors. Their capacity for instruction, however, has had no opportunity for development, and consequently their being detailed for this duty is purely experimental. The question that naturally presents itself is this: Is not this experimental detail somewhat detrimental to those who are to be instructed? In other words, is there a sufficient element of instruction in this method?

A capacity for teaching does not always accompany the possessor of knowledge. The faculty for imparting information is a rare attribute of an intelligent mind. Simply to superintend in a perfunctory manner the monotonous study of the problems and formulas of a dry course of mathematics may aid the training and discipline of the mind, but it does not necessarily serve to quicken the intellect or stimulate original thought and reasoning.

It has at times happened that some officers have had enough occupation for their minds in the review of the course as presented for daily recitation, allowing them no time or inclination to go beyond that. What suggests itself to the Board, therefore, is this: Is sufficient care taken to secure special aptitude for teaching in this constant detailing and changing of nearly fifty instructors for the cadets? And when this special aptitude for teaching may be discovered, does it prevent the transfer of the officer to other duty, simply as a question of detail and nothing else? Are there not elements of error and possible injustice both to cadets and instructors in the present methods pursued?

Still another question presents itself to the Board in relation to the ethical course: Has experience shown that the text-books in this course are the best calculated to give to the minds of the cadets that polish which cannot be extracted from pure mathematics? Is there not lacking, at the end of the course, that habit of clear enunciation and that power of constructing the English language so essential to a finished education?

On the contrary, is there not developed, from one cause or another, a habit of hesitation in speech, a useless repetition of words, and a want of confidence in the methods and manner of stating conclusions to which the mind has arrived? Would not reading aloud selections from standard authors as a part of the daily recitations have a tendency to check this habit?

It is very possible that a certain feeling of nervousness and anxiety attending the ordeal of a rigid examination may have produced erroneous impressions on the minds of some of the members of the Board, who have felt it incumbent upon them to refer to this subject.

Looking at the whole subject of instruction from the standpoint of the examinations, the Board does not hesitate to express the opinion that these examinations evidence the diligence and conscientious zeal of the professors and instructors, and they show that the cadets as a rule have an earnest desire to acquire in a thorough manner all the knowledge of their future profession that they possibly can, and to acquit themselves with honor and credit towards their *alma mater* and the Government that is educating them.

FIELD EXERCISES AND MANEUVERS.

The Board was extremely fortunate in being favored with fine weather during the whole period of their stay at the Academy. This permitted the carrying out of the entire programme of the out-of-door exercises without interruption. The infantry, artillery, and cavalry drills embraced all the evolutions of those several arms of the service, and were executed in a faultless manner. Those of the cavalry and artillery especially, were conducted with so much dash and spirit, that at times it seemed as if some accident must happen, but nothing whatever occurred to mar the perfection displayed at each drill. A new field battery is, however, required.

The horsemanship exhibited by the cadets in the riding-hall was excellent, and an equal proficiency was shown in the gymnastic exercises.

The practice with the sea-coast battery was accompanied by great skill and precision in the handling of heavy guns, although neither the guns nor the methods were in accordance with modern improvements.

The rapid and orderly manner in which the pontoon bridge was con-

structed, and the ease and readiness with which the arduous duties of this drill were performed, is worthy of praise.

In fact, the Board would find great difficulty in suggesting terms of criticism in connection with any of the field exercises. It is somewhat remarkable that, with so much mental work to accomplish, the time could be found to arrive at such a degree of excellence in this branch of instruction.

It is evident, however, that this physical exercise, arduous and incessant as it is, must necessarily be an important factor in the education of the cadet, as a simple counterpoise to the mental strain which the pressure of studies involves. It would be a very difficult matter indeed for the mind to stand this pressure without the accompaniment of the drills and maneuvers.

CADET ENCAMPMENT.

In connection with field exercises should be mentioned the encampment of the cadets during the summer months. Immediately on the close of the examination each year the cadets go into camp and remain there until the last of August, thus giving two and a half months to this very essential part of the education.

A member of the Board visited and inspected the camp with the view of including the result of such inspection in this report.

The camp ground is on the easterly side of the plain adjoining the site of old Fort Clinton, and overlooking the Hudson. It is laid out in accordance with the methods prescribed in the Regulations for the United States Army, and is arranged for the four companies constituting the cadet battalion.

In all the appointments of the camp nothing is omitted that is essential to a complete knowledge of this important element of military education. The camp is the habitat of the soldier in time of war. On its proper location and sanitary care depend his health and comfort, and on its thorough discipline depends the character, and often the safety, of the Army.

At the Military Academy it is the camp life that gives to the cadet that knowledge of military duties that renders this portion of his education as familiar as the alphabet to the language. These duties and methods, this discipline and instruction, he never forgets. They form a part of his nature, and when the necessity comes for him to make a practical use of the information thus acquired, he is never at a loss as to what course to pursue.

The drills in the several arms of the service during the encampment are continuous, test the endurance of the cadet to the utmost, and develop his physical condition in a manner such as nothing else could accomplish. His life during this period is in all respects that of a common soldier, and none of the duties of the soldier, no matter how trivial, are omitted. The commandant of cadets, and the four tactical instructors, occupy tents during the encampment, the same as the cadets, and the most assiduous efforts are made to make this portion of the course in every way complete.

PUBLIC BUILDINGS AND GROUNDS.

The land owned by the United States and reserved for public use at West Point consists of 2,200 acres, a comparatively small portion of which is occupied by the institution proper.

For the most part it is a wild, rugged tract, covered with forest trees, situated in the Highlands of the Hudson, where the river makes an abrupt bend, forming the projecting point from which the name of "West Point" is derived. The background is high mountain land, rising precipitately from the plain, which is a part of the ancient terrace of the river, and possesses a remarkable geological interest. The drift of the diluvial period has deposited in the gravel and boulder beds that form the upper stratum of the plain specimens of all the rocks and many of their mineral and fossil remains that are found in place for a distance of 250 miles to the north, and as those rocks embrace the whole series of the successive formations that constitute the earth's crust from the archæan to the latest quaternary, these deposits may be looked upon as so many pages of the great book of nature illustrating the history of the created world, transported by glacial action and mighty floods to this spot, selected for a national school of instruction. This plain or ancient terrace is what constitutes the local of the Military Academy.

At the sharp bend in the river, with two sides commanding the stream on the north and east, stands Fort Clinton, the old field work, restored and preserved, that was thrown up originally by the patriots of '76. On the heights beyond are the ruins of old Fort Putnam, its crumbling casemates marking the ravages of time, and telling of the century that has gone by since sturdy heroes built here their citadel of defense, so nearly lost by treason's dastard act.

On all sides arise the statues and monuments that have been reared by loving hands to the memory of gallant soldiers who have died for their country. The very atmosphere is redolent of patriotism, honor, and chivalry. Surely there is nothing wanting here to stimulate to noble deeds.

The buildings are situated for the most part at the base of the mountain slope, while the broad level plain in front is devoted to the infantry exercises and evolutions of artillery and cavalry. The area in actual use does not exceed 200 acres. The topographical map accompanying this report exhibits that portion of the reservation in occupation.

Extensive as were the wise provisions made to secure that seclusion for the institution so essential to the maintenance of the discipline and training of the cadets, such has become the attractiveness of this region of country that population is crowding towards the Academy from the southward to a degree that it would seem advisable to secure if possible the tract immediately adjoining the reservation on the south, belonging to the Kingsley estate, to prevent an undesirable occupation of that property and a too close proximity of possibly injurious influence. There can be no question that the topographical location of the Academy has been one of the most successful elements in the education of the cadets, and the maintenance of its seclusion is of all things the most to be desired.

BUILDINGS.

The population of West Point, or those living on the Government property, consists almost exclusively of the cadets, their officers and professors, and the soldiers enlisted for special service in connection with the institution. Three classes of buildings have been erected for the use and purposes of the institution:

First. Those devoted to the exclusive use of the Corps of Cadets.

Second. Those assigned as quarters to the officers and professors.

Third. Those erected and designed for the use of the soldiers.

The first consists of the cadet barracks, mess-hall, riding-hall, academic building, library and astronomical observatory, cadet chapel, hospital, administration building, and commissary building. These are all in near proximity to each other, within a nearly quadrangular space on the southerly end of the plain. All are built of stone. The cadet barracks recently erected is an L-shaped four-story edifice, with two sally-ports. It faces to the north and west, with an open court in the rear, and verandas on the two inner sides. It is divided by lateral hallways into a series of double sets of quarters, four on each floor, sixteen to each hallway. Each room is occupied by two cadets, generally members of the same class. The rooms are heated by steam and lighted with gas. Bath-rooms are provided in the basement, and every cadet is required to bathe a certain number of times each week, winter and summer. The mess-hall and hospital, also recently erected, are in every way adapted to the purposes for which they are designed, the mess for unmarried officers adjoining the cadet mess-hall. The library building requires remodeling and more room for the books it contains. The philosophical department, now occupying a portion of this building, should be provided with better accommodations elsewhere. The cadet chapel is not large enough and should be extended. The building for administrative offices and the riding-hall are ample for their uses. The academic building is in every respect unsuitable for the purposes required, and is in a dangerous condition, demanding *immediate* attention.

The lower floor, at one time used as a riding-hall, is now divided between the gymnasium and the department of chemistry, affording to neither the accommodation necessary. The two upper floors, used for section or recitation rooms and for the drawing classes, are liable at any time to collapse, from the insufficiency of the interior supports, and the building is at the same time in danger from destruction by fire, owing to its imperfect construction. No delay should be made in reconstructing this building. The plans submitted herewith show what is necessary to be done to render it suitable for the purposes intended. The recitation and lecture rooms, now used by the philosophical department, as well as those occupied by the department of chemistry and geology, are utterly inadequate. A new building devoted to these two departments is much needed.

No other institution of any rank in the country is so poorly supplied with these essential adjuncts to a scientific course of education.

At one time the Military Academy stood almost alone as a scientific school, while nearly all the colleges and universities of the country made the study of the classics the chief feature of their curriculum. Now, however, the study of the sciences has become an important element of education everywhere, and coincident with this development generous hands have come forward to aid by legacies and endowment the leading institutions of learning throughout the country in their efforts to promote the higher education of young men. This generous support was absolutely necessary, as without the requisite funds the large expense incident to this new departure could not have been met. The following table exhibits the enormous extent of this voluntary aid to education during the past ten years:

Statement showing aggregate amounts of gifts and legacies, from 1876 to 1885, inclusive, to several American colleges, &c.

Names and locations of the institutions.		1876 and 1877.	1878 and 1879.	1880 and 1881.	1882 and 1883.	1884 and 1885.	10 years, 1876 to 1885.
University of California.	Oakland, Cal	\$700,000	\$325,000	\$75,000	\$90,815	.....	\$1,000 515
Yale College	New Haven, Conn.	20,500	101,727	445,970	552,000	\$111,138	1,321,345
Wesleyan University ...	Middletown, Conn.	27,301	150,000	394,400	2,000	52,604	606,305
Harvard University.....	Cambridge, Mass.	270,049	330,341	555,500	1,001,445	145,851	2,303,209
Tuft's College	College Hill, Mass.	.....	14,000	155,000	100,000	26,030	374,030
Wellesley College.....	Wellesley, Mass.	.....	155,000	205,000	.....	29,000	389,000
Washington University.	Saint Louis, Mo ..	141,000	.....	248,600	20,000	169,000	578,600
College of New Jersey ..	Princeton, N. J ...	100,000	165,000	132,050	.....	209,530	607,180
Presbyterian Theological Seminary.	.....do	275,345	12,375	320,000	20,875	8,443	631,538
Cazenovia Seminary.....	Cazenovia, N. Y ..	75,000	20,000	65,000	10,500	.....	200,500
Columbia College	New York, N. Y ..	.....	2,250	630,000	5,000	558,875	1,216 125
General Theological Sem- inary (Episcopal).	.....do	21,800	.....	106,000	128,100	08,167	323,067
Union Theological Sem- inary (Presbyterian).	.....do	32,000	109,000	103,000	100,000	303,000	649,000
University of Rochester.	Rochester, N. Y ...	3,163	7,000	281,800	48,700	25,000	363,663
Rochester Theological Seminary.	.....do .....	.....	150,000	123,000	100,000	76,000	455,000
Union College.....	Schenectady, N. Y	130,800	84,000	153,554	.....	.....	368,154
University of Pennsyl- vania.	Philadelphia, Pa..	150,000	.....	200,000	142,722	80,324	570,100
Vanderbilt University ..	Nashville, Tenn...	320,000	100,000	150,000	150,000	210,000	930,000
University of Vermont ..	Burlington, Vt .....	.....	185,375	58,150	23,000	105,000	371,525
University of Virginia ..	University of Vir- ginia P. O., Va.	205,000	51,000	141,000	.....	490,000	890,000
Tulane University of Louisiana.	New Orleans, La..	.....	.....	.....	1,500,000	500,000	.....
Aggregate for the schools above mentioned...		2,474,028	1,858,065	4,496,633	4,062,733	3,210,004	16,711,230

For the whole of this period the Military Academy has received barely sufficient to maintain its normal condition, ignoring entirely the progressive developments at all the other centers of education. That this is a false economy and inconsistent with our national progress cannot be denied. What those great benefactors of their race who have devoted their wealth to the cause of education, like Stephen Girard, Peter Cooper, Johns Hopkins, Leland Stanford, Cornelius Vanderbilt, George Peabody, Paul Tulane, and others have done for the country at large Congress should be willing to do for its national schools, and that is to keep them up with the spirit of the age.

Large and munificent as have been these gifts to the leading colleges, the sum total of the contributions, great and small, to education at large in this country during the past ten years reaches nearly \$60,000,000. No stronger argument is needed to encourage generous liberality on the part of Congress towards the institutions of learning under its care.

The gymnasium, which has become so important a feature in the education of the cadets, is also entirely inadequate. Gymnastic exercises are so admirably adapted to develop the physical condition of the young men, and fit them for the arduous duties they will be called upon to perform in their future career, that a separate building, constructed especially for this purpose, and fitted with all the appliances requisite for thorough athletic training, is urgently demanded. The quarters of the officers are most of them buildings erected some years ago, that have from time to time been repaired and enlarged. They are now in tolerable repair and, together with the alterations authorized at the last session of Congress to the old hospital building, are sufficient for present needs. The quarters occupied by the soldiers, located on the northerly slope of the Government grounds, have attracted the earnest attention of successive Boards of Visitors, and have been the subject of repeated

and urgent recommendation. The truth is that these buildings and all the surroundings of this portion of the public grounds are simply a disgrace. The soldiers living here constitute an element of absolute necessity to the institution. Without their aid the education of the cadet could not well be accomplished. These soldiers should not only all be men possessing the highest physical and moral qualities of a soldier, but they should be encouraged to feel a pride in the duty assigned to them and a zeal in its discharge. Their quarters and the grounds around them should not only be suitable in every respect, but should possess all the appearance of order and neatness that characterize the buildings on the plain. A suitable appropriation for renovating the soldiers' barracks, for laying out and improving the grounds around them, for the construction of a proper building for the quartermaster's workshop and storehouse, and especially the substitution of a complete set of neat quarters for the married soldiers in place of the rookeries now occupied by them, and, in addition, a sufficient sum for perfecting the sanitary condition of the entire area devoted to the use of the soldiers, is demanded as of the first necessity. It has been found by experience at the Academy that married soldiers provided with quarters for their families are not only more steady in their habits, but, as a rule, more reliable and assiduous in their attention to duty. They become attached to the "Point" as their permanent home, and generally serve several terms of enlistment, thus giving to the Government the benefit of their experience and of the habits acquired by years of special training in specific duties. Hence the provision of comfortable quarters for these men is a matter of simple economy. The detailed report of the committee on public grounds, together with the correspondence connected therewith, affords valuable information on this subject, and is included in the appendix.

The building used as a chapel for the soldiers is insufficient and unsuitable. The Board recommends an appropriation for a new building for this purpose, and also a small sum for its care and for the compensation of the clergymen of the different denominations who administer divine service.

No provision has heretofore been made for this purpose, although a number of cadets attend services at this chapel, some of them teaching the soldiers' children at Sunday-school.

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FISCAL AFFAIRS.

The fiscal affairs of the Academy are in charge of Capt. William P. Spurgeon, Twenty-fourth United States Infantry. This officer is quartermaster and commissary of cadets, and treasurer of the Military Academy. His duties embrace the receipt and expenditures of all moneys appropriated for the maintenance of the cadets.

The subcommittee states that the fiscal affairs were carefully and thoroughly investigated, the officer in charge rendering every facility to the committee to enable them to possess themselves of full information in reference to every expenditure however minute. The accounts are admirably kept and show at a glance the exact condition of the funds, and a detailed statement of expenditure. The committee present herewith a bimonthly statement of the accounts, to show the form in which they are kept. These statements are made and the accounts

are subjected to an inspection every two months by an inspecting officer of the post having no connection with the control or management of the funds.

The management of the post and cadet funds by the officer in charge deserves the highest commendation; the expenditures are made in such manner as will promote the comfort and welfare of the cadet. The supplies are purchased at the cheapest rates and no waste is permitted, every effort being made to utilize everything of value so as to increase the variety and quality of the rations for the cadets' mess, with a result highly satisfactory to the cadets, and general satisfaction exists where once grumbling held chief place.

It is not often that in positions of the kind held by the treasurer of the post and cadet fund the occupant is found so thoroughly devoted to his duty and to the interest given him in charge as in the case of the present treasurer at West Point.

The committee are fully satisfied with the management of the fiscal affairs given them to examine, and bear their testimony to the faithful administration of the treasurer. The duties of the fiscal officer include the very important duty of providing the necessary food for the cadets, and its proper preparation. No more responsible position could be held in connection with the Military Academy, and no one who is not peculiarly fitted for these duties could discharge them with satisfaction. There is nothing connected with the life of a soldier upon which so much depends as the proper cooking of his ration. At the same time, there is nothing a soldier suffers from more than badly cooked food. Indeed, it may safely be said that the cooks are the curse of the Army; they destroy more lives than the cannon of the enemy, and can do more to disable an army than a pitched battle. Even more important is this matter of cooking to the young men who are being trained for a soldier's life and a soldier's duties. The close and unrelenting attention to study demanded from the cadet, as well as the constant drill and exercise to which he is subject, requires above all things that the food furnished to him should be of the most nutritive character and so prepared as to be readily digested. This has not always been the case at the Academy. For a number of years the furnishing of food to the cadets was let out by contract, with results that many look back upon with no other feeling than disgust. Badly cooked and tainted meat was more the rule than the exception. Meals served in a filthy manner, nauseating slops instead of properly prepared coffee and tea, rancid butter, and sour bread—these are some of the reminiscences which older graduates retain in their memories of their cadetship. To leave the table hungry and in disgust was a common occurrence, and what a gross wrong and injustice! How could it be expected that under such circumstances a cadet could study or perform his duties properly?

The present system is not only an immeasurable improvement on that of former years in the quality and preparation of the food, but, in addition, it is now served in a cleanly, orderly, and refined manner, in the place of the former offensive surroundings. The very odor of the old mess was revolting to an extreme degree. The present arrangement and conduct of the cadet mess seems to the Board of Visitors to be above criticism, and the economic management by which such a variety is secured at such a reasonable cost is certainly worthy of all praise.

Captain Spurgeon undoubtedly possesses rare qualities for the duties to which he has been assigned. The eminent success of his administration of the commissary department could not have been accomplished without a peculiar talent, not readily found, and the Board unites in the

recommendation that no change be made in this officer's detail so long as he is able and willing to perform his duty as he is now doing.

In reviewing the whole subject of public education as exhibited at the Military Academy, the Board have in mind the many discussions and numerous questions that have from time to time arisen in regard to the utility of the institution and the methods pursued, not only as to the admission of cadets but their subsequent education and training. Within the last few years there has been developed a tendency on the part of members of Congress, when called upon by the Secretary of War or Navy to nominate a cadet for the Military or Naval Academy, to open the selection to public competition, appointing a voluntary board of examiners for this purpose, and giving the appointment to the one standing highest on the list, instead of making an individual appointment. Not all the members of Congress, however, follow this rule. It becomes a matter of interest, therefore, to determine what are the comparative merits of the two methods pursued. To this end the Superintendent of the Academy has caused to be prepared a table showing the relative standing of the cadets for those successive years embraced in the two methods of appointment.

From the following table will be seen how candidates appointed after competition and without competition have stood the test of the entrance examinations from 1873 to 1886, inclusive:

Years.	Competitive.		Direct.		Years.	Competitive.		Direct.	
	Admitted.	Deficient.	Admitted.	Deficient.		Admitted.	Deficient.	Admitted.	Deficient.
1873	57	16	61	68	1882	63	15	67	30
1874	26	10	63	50	1883	68	12	73	41
1875	40	20	75	47	1884	46	12	58	30
1876	39	11	60	42	1885	41	7	54	29
1877	40	27	50	60	1886	74	23	54	30
1878	40	0	62	39	Total.....	650	190	811	306
1879	46	13	43	21					
1880	32	10	41	24	Per cent....	77	23	80	40
1881	23	18	52	42					

The following table shows the number of cadets admitted from 1873 to 1882, inclusive, exhibiting separately the number who have successfully graduated, as well as the casualties, under each mode of appointment:

Years of entering.	Total number admitted.	Appointed by competition.					Appointed directly.				
		Graduated.	Resigned.	Discharged.	Dismissed.	Died.	Graduated.	Resigned.	Discharged.	Dismissed.	Died.
1873	118	84	3	10	.....	47	42	10	19	.....	71
1874	80	13	4	10	1	28	27	10	22	2	61
1875	121	30	8	6	2	46	34	18	22	1	73
1876	98	24	4	16	.....	45	24	11	16	1	63
1877	98	30	4	11	.....	61	20	8	19	4	65
1878	102	22	7	13	1	43	17	28	10	.....	68
1879	88	29	4	14	.....	47	13	14	14	.....	41
1880	73	23	3	5	1	32	14	12	15	.....	41
1881	85	16	0	8	.....	37	24	10	18	.....	55
1882	129	40	7	12	1	60	35	11	23	.....	69
Totals	990	260	59	103	5	433	250	127	181	8	367

Competitive:	Per cent.
Graduated	63
Failed to graduate	37
Direct:	
Graduated	45
Failed to graduate	55

Thus showing that the percentage is in favor of competitive examination so far as intellectual capacity is concerned.

The point has also been raised that the tendency of the institution is undemocratic; that the methods of appointment and the course of education develops an exclusive class, removed from the great body of the people, with associations and habits uncongenial and unadapted to republican institutions. It is therefore an additional matter of interest to learn the conditions of life from which these cadets have sprung; and as the best method of obtaining this information the occupation of the father of each cadet appointed during a certain period is selected as defining his social status at the time of entering the Academy.

Occupation of fathers of candidates for admission.

Occupations.	Num-ber.	Occupations.	Num-ber.
Author	1	Undertakers	4
Artist	1	Enlisted men	4
Auctioneer	1	Nurserymen	5
Brewer	1	Dentists	7
Butcher	1	Secretaries	8
Collector	1	Speculators	10
Conductor	1	Heads of corporations	10
Cook	1	Mining	11
Detective	1	Real estate	11
Distiller	1	Insurance	12
Inspector of police	1	Liverymen	12
Chief of police	1	Laborers	18
Saloon-keeper	1	Officers of volunteers	19
Superintendent of prison	1	Professors	21
Messenger	1	Ship-captains	22
Museum-keeper	1	State officers	23
Theater-manager	1	Members of Congress	23
Prison warden	1	Contractors	24
Wagon-master	1	Brokers	27
Tanner	1	Railroad	29
Steward	1	Engineers	34
Builders	2	Unknown	35
Musicians	2	Editors	39
Overseers	2	School-teachers	39
Policemen	2	Hotel-keepers	42
Politicians	2	Agents	47
Printers	2	Officers of the Navy	52
Architects	3	Officers of the Army	246
Barbers	3	Bankers and bank officers	55
Gardeners	3	Clerks	58
Journalists	3	County officers	61
Photographers	3	United States civil officers	69
Stock dealers	3	Manufacturers	93
Bakers	4	Clergymen	102
Lumbermen	4	No occupation	170
Millers	4	Mechanics	263
Presidents of colleges	4	Physicians	271
Publishers	4	Lawyers and judges	455
Superintendents of schools	4	Merchants	495
Surveyors	4	Farmers and planters	827

It will be seen that merchants, farmers, and lawyers form the great majority, while nearly all the trades and industries are represented from the lowest to the highest. The table is a complete refutation of the charge of exclusiveness or favoritism in regard to appointments.

* * * * *

In looking back upon the history of the Academy from the time of its foundation to the present period, it is found that, notwithstanding the

purely technical education that is acquired here for a special purpose, the graduates of the Academy are to be found in every walk and calling of life. The total number to date is 3,173.

Serving, as a rule, in the Army a sufficient length of time to return to the Government all that it demands for the education received, very many of them have sought and found those positions in civil life which their training and education qualified them to fill, until nearly every grade of industry has ranked them among its numbers. Many have been distinguished in high public positions, as governors of States, Senators and Representatives in the National Legislature, bishops, priests, judges, engineers, lawyers, physicians, professors in colleges, presidents of universities, and diplomatists, not omitting the highest office in the land—a President of the United States. The following list, taken from Cullum's Register, exhibits these facts in detail:

Civil occupations of graduates of the United States Military Academy.

Occupation.	Num-ber.	Occupation.	Num-ber.
President of the United States	1	Professors and teachers	119
Members of the Cabinet of the United States	4	Superintendent of Coast Survey	1
Ministers from the United States to foreign courts	7	Surveyors-general of States and Territories	6
Chargé d'affaires from the United States to foreign courts	2	Chief engineers of States	14
United States consuls-general and consuls	7	Presidents of railroads and other corporations	28
Members of the United States Senate and House of Representatives	16	Chief engineers of railroads and other public works	28
United States civil officers of various kinds	99	Superintendents of railroads and other public works	59
Presidential electors	6	Treasurers of railroads and other corporations	12
Governors of States and Territories	8	Civil engineers	187
Lieutenant-governors of States	2	Judges	12
Members of State legislature	72	Attorneys and counsellors-at-law	1
Presiding officers of States' senate and house of representatives	8	Bishops	1
Members of conventions to form State constitutions	13	Clergymen	18
State officers of various grades	51	Physicians	12
Adjutant and quartermasters general of States and Territories	14	Merchants	101
Officers of State militia	129	Manufacturers	46
Mayors of cities	10	Artists	3
City officers	34	Architects	7
Presidents of universities, colleges, &c.	35	Farmers and planters	202
Principals of academies and schools	27	Bankers	16
Regents and chancellors of educational institutions	11	Bank presidents	7
		Bank officers	21
		Editors	25
		Authors	91

The remarkable fact is here presented that the Academy has contributed to the educational force of the country no less than 35 presidents of universities or colleges, 27 principals of academies and schools, 11 regents and chancellors of educational institutions, and 119 professors and teachers, making a total of 192 instructors of youth distributed throughout the country; showing that by an apparent method of natural selection the institution may be regarded in one sense as a national normal school, giving to the people at large all the benefits of its higher education and superior training.

All those graduates who have returned to civil life have shown a readiness, whatever their occupation, to respond with patriotic zeal to the call of their country in time of need, willingly forsaking lives of comparative ease to endure again the hardships of the military service. In this manner the Academy has scattered broadcast its remarkable system of education and its superb training, giving to the country the

ices of its graduates, no less valuable, perhaps, in time of peace they are in time of war.

The Board of Visitors, finding much to approve and little to criticise the present administration of the Academy, commend the institution and the continued fostering care of Congress, believing that its expense is well compared with its results, and that the country receives back many times its cost in the valuable services of a body of men distinguished for intellectual ability, strong conservatism, a keen sense of duty, and an unimpeachable personal integrity.

A report of which is respectfully submitted.

KEMP P. BATTLE.

WILSON S. BISSEL.

WILLIAM H. BLAIR.

GEORGE P. COSBY.

W. G. SUMNER.

FRANCIS T. NICHOLS.

THOMAS C. MCCORVEY.

CHARLES F. MANDERSON.

RANDALL L. GIBSON.

JAMES LAIRD.

EGBERT L. VIELE.

DECEMBER 22, 1886.

I concur in all the suggestions and recommendations contained in the report, except that giving an increased number of appointments.

EDWARD S. BRAGG.

REPORT
OF
THE SECRETARY OF THE NAVY.

NAVY DEPARTMENT,
Washington, December 1, 1886.

To the PRESIDENT:

It was demonstrated in my last annual report that a reorganization of the Department was necessary. The form which the reorganization should take was ascertained by reference to the natural divisions of the functions of the Department. It covered, first, a military branch, dealing with the *personnel* of the Navy, its enlistment and discipline, and the movements of the fleets, &c.; second, a branch having to do with the creation of the implements of war—the construction branch; third, the branch dealing with the purchase of supplies, keeping of stores, &c., and having charge of the general accounts of the Department. This was shown to be in general the form of organization existing elsewhere.

I can scarcely add to the force of the facts presented upon this subject in my last annual report. Congress has not as yet taken final action upon the matter. A bill embodying the substantial points passed the Naval Committee of the House with but two dissenting votes, and awaits action upon the House Calendar.

Some months since I decided to exercise whatever power was possessed by the Secretary towards bringing about necessary changes. His power is limited to the distribution of the functions and business of the Department among the existing Bureaus; and I have so far dealt only with the duty, which seemed to be imperative, of consolidating, as far as possible, in one Bureau the general purchases of the Department, the care and custody of stores, and creating there a system of book-keeping by which responsibility for the care and disposition of the property shall be had. Preliminarily, upon the 12th day of June last, an order was issued constituting three officers of the Navy a board for the purpose indicated by the following letter:

NAVY DEPARTMENT,
Washington, D. C., June 12, 1886.

SIR: You are hereby appointed senior member of a board to take an inventory of all the stores and material at the various navy-yards and naval stations, under cognizance of the several Bureaus of the Navy Department.

The inventory will consist of—

- (1) A statement of the quantity of such stores or material on hand.
- (2) The condition of such stores or material; the proportions which are serviceable; such as are capable of being repaired; and that part which is unserviceable or obsolete.
- (3) The proportion which cannot be profitably used or reworked, and which should therefore be appraised and sold in conformity with the act approved August 5, 1882.

In every form of business there accumulates in the stock of materials articles which become unserviceable, either from deterioration in quality or from the introduction of improvements. It is a rule with all successful business men to keep such stock down to the least amount, and I am desirous of disposing of the surplus and unserviceable material that the Department has on hand (in conformity with law), because I believe that the loss from deterioration and the cost of caring for such stock involves a useless annual expenditure of the public money.

Upon your application the commandants or commanding officers of the navy-yards and stations will order such inspectors and experts as you may ask for to report to you for the purpose of aiding your Board in making the examination required by this order.

Pay Director Edward May and Naval Constructor W. L. Mintoyne have been ordered to report to you by letter for duty as members of the Board.

Very respectfully,
Capt. R. W. MEADE, *U. S. N.*,
Navy-Yard, Norfolk, Va.

W. C. WHITNEY,
Secretary of the Navy.

The work imposed upon the Board has been found to be extremely difficult and laborious. An inventory has not been as yet finally completed. The necessity for a better and more improved system is forcibly illustrated by the results of the inquiries of the Inventory Board.

First. There is at present no real responsibility for the care and disposition of the property. In one Bureau a property account is kept and in others none. Property lost, misused, or stolen cannot be traced or accounted for, and no person can be held responsible. The Fourth Auditor in his report just issued calls attention to this remarkable circumstance, which was also referred to in my last annual report.

Second. The inventory shows a very large and unnecessary accumulation of stores and supplies by the different Bureaus, aggregating over twenty millions of dollars in appraised value. The Board reports between three and four millions in value to be obsolete and useless at the present time, only entailing expense for keepers and constant care to preserve them in condition. Among these accumulations some very absurd facts appear. At the eight navy-yards there have accumulated altogether of augers and bits 46,566, of which 25,274 have been lying for several years at closed yards where no work has been or is likely to be done. Twenty-nine thousand five hundred and forty-two gross of screws are on hand, 10,896 gross lying at closed yards. There are 146,385 files in stock, 42,142 of them lying at closed yards. There are 11,813 paint-brushes in stock, 2,246 of these in the stores at closed yards. All of these tools are serviceable, mostly new.

[There are found to be over 12,000 tons of cast and wrought iron lying in scrap about the yards, 759,000 pounds of composition and brass, 159,000 pounds of old copper, and 193,000 of old lead.]

Of most of these articles some Bureaus have recently made considerable purchases and are even doing so at the present time, while to

the credit of other Bureaus there are very large amounts in stock. Captain Meade, president of the Inventory Board, says:

In going through one of the yards where the construction department was short of cut nails, the storehouse in charge of steam engineering was found filled from floor to ceiling with barrels on barrels of the needed nails. I asked the officer in charge how long at his present rate of expenditure it would take to use up those nails that construction and repair so badly needed; and he replied, "Well, sir, I think about fifty years."

These stores of tools or machinery are periodically oiled or painted; in the meantime require large storage room, a force of watchmen, &c., and are constantly becoming obsolete and useless. The expenditure entailed in a series of years exceeds in all probability the value of the property. Placed under one responsible organization such things should not occur. They would not be permitted in any private business. This large accumulation of stores, gradually becoming useless, is in the nature of a side-light thrown upon the system, the evil of which has been heretofore thoroughly exhibited and exposed. I confidently expect that under the orders recently issued, by which the business is to be consolidated under the Paymaster-General, a better system may be inaugurated and maintained, which will, in the end, prove more economical and satisfactory to the service in every respect.

THE ADDITIONAL NEW CRUISERS.

The experience of the Department in its first attempt at the creation of modern vessels of war has been such as to excite the greatest concern and disappointment. An examination of the facts with reference to them demonstrated that an entirely new departure was necessary in undertaking further similar construction. The one characteristic which an unarmored cruiser must possess is great speed. This is determined by the function which she is expected to perform in modern warfare. She is a "commerce destroyer." She must be able to escape from iron-clads and outrun, so as to overhaul, merchantmen. If slower than iron-clads she could not keep the sea, and if slower than merchantmen she might as well stay in port. This division of ships by the functions which they are expected to perform is one of the things which has come about of recent years. When it became impossible to concentrate in one ship both the greatest speed, strongest armament, and the highest defensive power, without reaching a tonnage displacement wholly out of the question, the division into classes, according to the functions which they were expected to perform, came about. Unarmored cruisers have become a distinct class, and the characteristic *absolutely indispensable to this class is very great speed.*

When the Dolphin, Boston, Atlanta, and Chicago were projected and the contracts for their construction entered into, it was well known what speed ought to be attained and what weight and character of machinery per ton of displacement was necessary to obtain it. Commercial vessels had at that time attained speeds ranging between sixteen and nineteen knots, and cruisers were being built in other countries, or had already been built, attaining the same speed.

The Dolphin and the Atlanta having both been completed and having had trial trips, it is possible to compare them in their results with similar vessels built contemporaneously elsewhere. The Dolphin, of 1,500 tons displacement, can be compared with the Alacrity and Surprise, English dispatch vessels of 1,400 tons each, and the Milan, a French dispatch vessel of 1,550 tons, all built contemporaneously. The Dolphin was designed for 2,300 indicated horse-power, the Alacrity and Surprise each 3,000, and the Milan 3,900. The highest mean horse-power developed upon trial was, in the case of the Dolphin, less than 2,200; of the Alacrity, 3,173; of the Surprise, 3,079; of the Milan, 4,132. The highest speed of the Dolphin, resulting from several trials, was 15.11 knots, running light; of the Alacrity, 17.95 knots; of the Surprise, 17.8 knots; of the Milan, 18.4 knots.

The Atlanta, the sister ship to the Boston, can be compared with the Esmeralda, the Giovanni Bausan, and the Mersey. All three were built in England; the Esmeralda for Chili, the Giovanni Bausan for Italy, and the Mersey for the English Government. The Atlanta is of 3,000 tons displacement; the Esmeralda, 2,920; the Giovanni Bausan, 3,068; and the Mersey, 3,550. The Atlanta was designed to attain an indicated horse-power of 3,500, the Esmeralda and the Giovanni Bausan each 5,500, and the Mersey 6,000. The trials had of the Atlanta indicate that her engines will develop less than 3,500 horse-power, while the Esmeralda developed 6,000, the Giovanni Bausan 6,680, and the Mersey 6,626. The maximum speed of the Atlanta will be less than 15 knots, while that of the Esmeralda was 18.28 knots, the Giovanni Bausan 17.5 knots, the Mersey 17.5 knots.

These facts are stated without any intention of locating responsibility or blame upon any person. It is impossible to ascertain where it should be placed. But they indicate a simple abandonment on the part of the Department of any attempt to reach the conditions which should have been attained, and the failure on the part of the contractor to reach the limited results expected by the Department. In considering the matter of constructing the additional vessels authorized by Congress in March, 1885, it was decided by the Department to exhaust every effort to avail itself of the most advanced thought and knowledge attained by our own and other countries upon the subject. The machinery of naval vessels is entirely different in character from that of merchant ships; and as no modern war-vessels have been for many years built in this country by our Government, up to the time of those just referred to, it seemed probable, on comparing results attained by the Department in its first effort with those reached by other countries, that important advances had been made elsewhere in the methods of attaining great speed and power which it had become necessary for us to utilize. For twenty years the principal market for modern war vessels has been England. Russia, Germany, Italy, Chili, Brazil, Japan, have all procured in the English market war-vessels reckoned among the best in their respective fleets. Great efforts have been made in most of these countries to

develop ship-construction at home, but not without first availing of the latest products attainable elsewhere as a basis upon which to build their own subsequent improvements and developments.

The Department has, since March, 1885, accumulated a large amount of information in the way of plans, showing the latest advances in the art, which, it is believed, have been availed of to a very important extent by the technical officers of the Department in the work upon the new ships now about to be undertaken. I believe it to be the true policy of the Department to gather such information from every quarter and at the same time to depend entirely upon our own resources for the construction of our vessels. The Department, during this time, has kept itself in consultation with the leading shipbuilders of the country, who feel themselves greatly concerned and interested in the success of the Department in these matters. The Department having in the course of its efforts purchased plans, including the detailed drawings of the motive power of the two most recent productions of Sir William Armstrong & Co., was strongly recommended by the several practical shipbuilders who were consulted to reproduce the machinery in two of the new ships, and to construct the other three upon the designs of its Bureaus. This course has been adopted. This intention has greatly stimulated the work of the Department, and it is hoped that the 4,000-ton ship, designed by the Bureaus will mark not only a very great advance over the last ships designed by them, but even over those built on the plans which have been obtained from abroad. All the time necessary for the preparation of the plans has been patiently permitted and every encouragement given to the successful solution of the problems involved.

The bidding for the construction of the new cruisers, which occurred on the 24th instant, resulted as follows:

Tabular statement of proposals for the construction of the steam steel cruisers Newark, Charleston, and Baltimore, and the two gunboats authorized by the acts of March 3, 1885, and August 3, 1886.

CRUISER No. 1 (NEWARK).

The Harlan & Hollingsworth Company, iron-steamship builders, Wilmington, Del. (the hull to be constructed according to the Department's plans and specifications, machinery according to contractors' plans) ..	\$1,224,900
The William Cramp & Son's Ship and Engine Building Company, Philadelphia, Pa. (hull to be constructed according to the Department's plans and specifications; machinery to be constructed on contractors' plans and specifications)	1,198,000
The Union Iron Works, iron-steamship builders, San Francisco (hull and machinery to be constructed according to the Department's plans and specifications)	1,132,000

CRUISER No. 2 (CHARLESTON).

The Harlan & Hollingsworth Company, iron-steamship builders, Wilmington, Del. (hull to be constructed according to Department's plans and specifications; machinery according to contractors' plans and specifications)	1,140,000
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The William Cramp & Son's Ship and Engine Building Company, Philadelphia, Pa. (hull and machinery to be constructed according to Department's plans and specifications).....	\$1,065,000
Same company (hull to be constructed according to Department's plans and specifications; machinery according to contractors' plans and specifications)	1,050,000
The Union Iron Works, iron-steamship builders, San Francisco, Cal. (hull and machinery to be constructed according to Department's plans and specifications)	1,017,50

CRUISER No. 3 (BALTIMORE).

The Harlan & Hollingsworth Company, iron-steamship builders, Wilmington, Del. (hull to be constructed according to Department's plans and specifications; machinery according to contractors' plans and specifications)	1,452,000
The Union Iron Works, iron-steamship builders, San Francisco, Cal. (hull and machinery to be constructed according to Department's plans and specifications)	1,348,000
The William Cramp & Son's Ship and Engine Building Company, Philadelphia, Pa. (hull and machinery to be constructed according to Department's plans and specifications).....	1,325,000

GUNBOAT No. 1.

The Columbian Iron Works and Dry-Dock Company, ship-builders and machinists, Baltimore, Md. (hull and machinery according to Department's plans and specifications).....	499,720
Charles Reeder & Sons, Baltimore, Md. (hull and machinery to be constructed according to Department's plans and specifications).....	495,000
Same firm (for machinery only, according to Department's plans and specifications)	185,000
The William Cramp & Son's Ship and Engine Building Company, Philadelphia, Pa. (hull to be constructed according to Department's plans and specifications; machinery according to contractors' plans and specifications)	455,000

GUNBOAT No. 2.

The Columbian Iron Works and Dry-Dock Company, ship-builders and machinists, Baltimore, Md. (hull and machinery according to Department's plans and specifications)	247,000
Charles Reeder & Sons, Baltimore, Md. (for machinery only, according to Department's plans and specifications).....	95,000
H. A. Ramsay & Son, iron-ship builders (The Ramsay Marine Engineering Works), Baltimore, Md. (for machinery only, according to Department's plans and specifications).....	89,000

The Department is able to award the contracts for the construction of these vessels to satisfactory parties and at satisfactory prices, with the exception of the vessel known as cruiser No. 1, a 4,000-ton ship designed by the Bureaus, for which no bid was received within the limit of \$1,100,000 fixed by Congress.

An examination of the prices shows this most satisfactory circumstance, that responsible ship-builders are willing to contract for the construction of cruisers having characteristics as high as those attained abroad at prices within 25 per cent. of the foreign prices. This is a subject of congratulation, in view of the fact that the character of the

ships is quite novel in this country, the conditions to be attained most exacting and difficult. Considering the difference in the price of labor and material between the two countries, the bidding must be considered to represent a fair and not too high price for the work expected. It is believed by the Department that the contracts can all be faithfully performed with profit to the contractor and every requirement of the Government fulfilled.

Concerning cruiser No. 1, orders have been given to reduce her size, for the purpose of carrying out the intention of Congress, if possible, of bringing the expense of her construction within the limit of \$1,100,000. It requires a readjustment of all the weights, and in fact the designing of a new vessel, which will necessarily take some months. Meanwhile it is hoped that the limit fixed by Congress may be removed, so as to render available the present plans, which have been the result of many months of careful labor on the part of the officers of the Department.

In the preparation of the form of contract to be entered into great care has been exercised to enlist the contractors pecuniarily in the attainment of a successful result.

The speed of the vessel depends upon the amount of horse-power developed by the machinery.

The device of paying premiums for a better result than the Department requirements, and exacting penalties for a less result, has been carefully elaborated and embodied in the contracts.

This system, in general use elsewhere, will it is believed prove beneficial to both the contractors and the Government.

In the preparation of the plans for these ships the ground has been gone over so thoroughly that further construction of this class of vessels could be undertaken without delay.

The cruiser, the construction of which was authorized August 3 last, is now under contract to be finished in a year and six months, under penalties. It is hoped that additional ships of this class will be authorized at the coming session of Congress.

THE NEW ARMOR-CLADS.

Congress at its recent session authorized the construction of two iron-clads of about 6,000 tons each. The subject has been referred to the Bureaus of Construction, Steam Engineering, Equipment and Recruiting, and Ordnance to take the necessary steps to prepare plans for the letting. The Department has also deemed it wise to offer to all approved naval architects and ship-builders an opportunity to compete with the work of the Department in the designs for these new ships, and the sum of \$15,000 has been offered as compensation for any accepted design for either of the vessels, the working drawings to be the subject of subsequent agreement. There are many distinguished architects who, of late years, have had much greater experience in new work than the liberality of our Government has made it possible for

our own to enjoy, and in starting upon the creation of a new navy the Department has no embarrassment in desiring to avail of the best talent anywhere to be found in placing the new work upon a par with the best of other countries, from which point it is entirely safe to predict that the ingenuity and talent of our own countrymen will suffice to keep us in the front rank for future work.

No time will thus be lost, even if no designs are submitted or accepted, for the process of preparing necessary plans is going on simultaneously in the Department.

THE ARMOR AND GUNS FOR THE MONITORS AND THE ARMOR-CLADS.

Congress also authorized the President, in his discretion, to direct the completion of the double-turreted monitors, and made provision with reference to the armor as follows:

That the armor used in constructing said armored vessels and for completing said monitors shall be of the best obtainable quality and of domestic manufacture, provided contracts for furnishing the same in a reasonable time, at a reasonable price, and of the required quality can be made with responsible parties. Such armor shall be accepted only after passing such tests as shall be prescribed by the Secretary of the Navy and inserted in the contracts.

In construing the statute for the purpose of ascertaining what, within the view of Congress, should be construed a "reasonable time," it was deemed to necessarily imply such a time as would be required to perfect in this country an additional plant adequate to the creation of the product desired, inasmuch as modern armor, either of steel or compound, able to stand the tests which would be prescribed, has not, up to the present time, been made in the United States, and for a fair competition in its manufacture a "reasonable time" would be the time necessary to be taken by a manufacturer to provide himself with the necessary plant to produce the article required. A shorter time would necessarily preclude the possibility of obtaining the same in the United States. No steel manufacturer in the United States, with his present plant, would enter into a contract to deliver armor guaranteed to stand the tests, based upon the tests of armor in use abroad, which the Bureau of Ordnance would prescribe.

In view, therefore, of the importance of utilizing the occasion as an inducement to steel manufacturers, it was decided to put the armor required for all of the vessels authorized by Congress into one contract, and offer the same to the competition of steel manufacturers in the United States, and allow a sufficient time for the successful bidder, if one or more should appear, to take the necessary steps in the way of the creation of plant and of initiating the manufacture. The extreme desirableness of obtaining this result has been a matter of general comment, in and out of Congress, for several years. It is closely allied with the matter of the steel forgings for the modern high-power guns, and the same course has been taken by the Department with reference to these. All of the material necessary in making the guns for the ves-

sels authorized by Congress has been combined in one advertisement, as an inducement to steel manufacturers of the country to undertake the necessary expenditure to prepare for the production of these heavy forgings. It is, of course, an experiment; but considerable interest has already been manifested by the steel manufacturers of the United States, and it is confidently expected that the offering of these important contracts to competition will eventuate in securing the result desired, and in rendering us independent of other countries in these most vital and important regards.

It is certainly a most lamentable circumstance that a country like ours, with its immense products of iron and steel, should be content to be dependent upon the manufacturers of any other nation for the fabrication of armor and high-powered guns, both of which are now essential and indispensable parts of a modern fighting ship. Whatever its commercial policy may be, for the creation of its necessary implements of war it should certainly be independent.

The armor and the armament of the vessels already authorized by Congress involve an estimated expenditure of \$8,732,000. It is assumed by the Department that these large contracts, instead of being thrown into the hands of foreign manufacturers, should be utilized at home and made the means of securing the establishment of this branch of industry here, so important to the Government.

If this policy is correct, and is to be pursued, the matter requiring immediate attention is not so much the authorization of the construction of more ships, but the means of securing the production of armor and heavy forgings in the United States. Unless these essential elements of a fighting ship are to be purchased abroad, any ships, the construction of which should be authorized at the coming session of Congress, would be finished from one to three years, probably three years, before the armor and the armament could be prepared.

This policy involves delay in the construction of the first vessels authorized, but at the end of five years the country would, by pursuing it, be independent and in a much stronger position in every respect than would result from any other course. In order that no time may be lost in preparing for the construction of further vessels, it is suggested that the Department have authority to employ existing and future appropriations made for new construction, in procuring, during the coming year, the preparation of plans of armored vessels to be hereafter authorized by Congress.

It has been the policy of Congress to require from the Department specific data covering the characteristics of the ships for the construction of which authority is asked from Congress, and a year is not too long for this work. It would be a great benefit at the present time if the appointment of a commission should be authorized to lay before the next Congress a comprehensive scheme of construction, such commission to be composed of both civilian and naval experts fit to deal with the subject. If Congress should at its next session make provision for the

manufacture in this country of armor and of high-powered guns, and should take steps for securing a broader and more intelligent consideration and treatment of the general subject of the construction proper to be undertaken, no time would in the end be lost and mistakes would be avoided.

Meanwhile, it is my duty to call attention to the urgent necessity for immediate action. The report of the Chief Constructor of the Navy sets forth the present condition of the vessels now in commission and their probable duration. If his estimate is correct, in six years the country will be possessed of but three serviceable cruising ships of those now upon the list; and unless a new navy shall be created, there will be none in existence after that lapse of time.

The small amount of modern armor which has been used by the Department of late years has been purchased abroad—a policy certainly not in keeping with proper dignity and pride, nor at all consistent with wisdom.

At the present time and for many years to come, in the event of a conflict with either a first or second class naval power, it would be quite impossible for the United States, as at present situated, to produce within its territory either the armor required for armored ships or the guns necessary for their armament. Nor would it be possible for the Navy of the United States to protect such articles in transit across the ocean, even if it were possible to obtain them elsewhere in time of war. As at present situated the country would be entirely defenseless in the absence of any ability to produce armor or the larger high-powered guns.

ESTIMATES, APPROPRIATIONS, AND EXPENDITURES.

The amount of the appropriations applicable to the current expenses of the Navy for the fiscal year ending June 30, 1886, was \$14,050,103.62, as follows:

Appropriated for the year	\$13,590,704 95	
Balance of pay of the Navy and pay of the Marine Corps on hand July 1, 1885	2,542,258 32	\$16,132,963 27
Deduct sum belonging to the Naval Asylum.....	59,867 00	
Also sum due general account of advances.....	2,022,992 65	
		2,082,859 65
Sum applicable as above stated		14,050,103 62
Drawn from the Treasury, deducting sums refunded, during the fiscal year		12,273,626 86
Balance undrawn June 30, 1886.....		1,776,476 76
In the hands of disbursing officers June 30, as reported by the Fourth Auditor		963,170 57
Amount available July 1, 1886.....		2,739,647 33
Drawn from the Treasury between July 1 and October 31, for the payment of liabilities of the year 1886.....		1,050,115 30
Balance available November 1, 1886.....		1,689,532 03

In the adjustment of the accounts for the fiscal year ending June 30, 1886, and after paying all liabilities for the year, it is believed that there will be an unexpended balance of from \$600,000 to \$650,000, about one-half of which is pay of the Navy and pay of the Marine Corps, showing an expenditure of about \$13,500,000, or upwards of \$500,000 less than the appropriations. These amounts do not include the expenditures for steel cruisers and completion of the double-turreted monitors.

Of the amount appropriated for the current expenses of the present fiscal year, there has been drawn from the Treasury, after deducting sums refunded, from July 1 to October 31, \$3,698,603.94, or \$587,160.45 less than during the same period of the past fiscal year.

Statement of appropriations and expenditures for the fiscal year ending June 30, 1886.

Appropriations.	Appropriations for fiscal year ending June 30, 1886.	Amounts expended fiscal year ending June 30, 1886.	Balances June 30, 1886.	Balances October 31, 1886.
Pay of the Navy (act of Congress approved March 3, 1885, appropriated \$6,940,780. Balance on hand June 30, 1886, \$2,267,172.25)	\$9,207,952 25	\$7,392,260 01	\$1,815,692 24	\$954,239 86
Pay, miscellaneous	375,000 00	342,454 86	32,545 64	8,880 14
Contingent, Navy	20,000 00	3,449 40	16,550 60	16,521 07
Pay of the Marine Corps (act of Congress approved March 3, 1885, appropriated \$649,642. Balance on hand June 30, 1886, \$275,086.07)	924,728 07	634,388 33	290,339 74	216,500 87
Quartermaster's Department of the Marine Corps	219,686 50	212,094 25	7,592 25	9,062 23
Naval Academy	181,220 45	177,349 72	3,879 73	4,270 87
Navigation and navigation supplies	87,500 00	61,894 24	26,105 76	7,156 81
Ocean surveys	10,000 00	1,532 72	8,467 28	5,747 82
Naval War College	8,000 00	7,787 90	212 10	9 90
Ordnance and ordnance stores	146,000 00	121,838 29	24,161 71	1,601 79
Repairs, ordnance	15,000 00	8,063 89	6,336 11	729 27
Torpedo Corps	60,000 00	47,460 02	12,539 98	6,015 82
Equipment of vessels	800,000 00	640,003 77	159,997 23	95,008 28
Transportation and recruiting, Equipment and Recruiting	30,000 00	18,188 66	11,811 34	7,807 11
Naval training-station, Coaster's Harbor Island, R. I.	25,000 00	19,536 05	5,463 95	2,067 09
Maintenance, Yards and Docks	200,000 00	186,722 03	13,277 97	2,416 63
Navy-yard, Brooklyn, N. Y.	30,000 00	.....	30,000 00	5,754 40
Navy-yard, Mare Island, Cal	276,000 00	208,210 87	67,789 13	55,506 88
Repairs and preservation at navy-yards	125,000 00	121,618 15	3,351 85	8,330 27
Naval Asylum, Philadelphia, Pa.	59,867 00	47,051 86	12,815 14	961 75
Surgeons' necessities and appliances	60,000 00	44,477 46	15,522 54	11,205 34
Naval hospital fund	30,000 00	29,907 01	2 99	3 96
Repairs, Medicine and Surgery	10,000 00	9,122 75	877 25	177 90
Provisions, Navy	1,085,000 00	951,682 14	133,317 86	12,627 65
Construction and repair	1,000,000 00	976,186 20	23,813 80	12,878 27
Steam Machinery	950,000 00	695,183 76	254,816 24	217,697 72
Contingent (Bureaus)	118,000 00	77,977 13	40,022 87	29,551 93
Civil establishment at yards and stations	79,000 00	76,774 15	2,225 85	2,265 82
	16,132,963 27	13,113,434 12	3,019,529 15	1,669,532 03
Deduct \$59,867 on account of Naval Asylum, as heretofore explained, and this amount difference in general account of advances being, June 30, 1885, \$2,022,992.65, and on June 30, 1886 (which is not an expenditure), \$1,243,052.39; difference, \$779,940.26; total ..	.....	839,807 26	.....	.....
Also, amount due general account of advances June 30, 1886	1,243,052 39
Net amounts	12,273,626 86	1,776,476 76

REPORT OF THE SECRETARY OF THE NAVY

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Appropriations for 1957 and estimates for 1958 for the Army and Air Force

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The Bureau officers of the Department have in general given much zeal and intelligence to the work of the Department during the last year. Useless expenditures have, in large number of cases, been cut off, reformed to get and control Department contracts have been broken up, and the work of the Department and its contracts have more and more fallen into the hands of well-known and established houses.

OCCURRENCES OF THE YEAR.

In the ship-building policy of other naval powers and the designs of war vessels recently laid down great value has been given to the importance of high speed and to the gradual development of the type known as the protected cruiser. In some cases the maximum speed guaranteed is as great as 20 knots, while a speed of nearly 19 knots has been attained by several vessels already in service.

Aside from the development in the type of cruisers already noted, a most prominent feature noticeable in the conduct of naval affairs is the great attention paid to the study of naval warfare by means of the squadron of evolutions. In this practical school, tactics, gunnery, the use of torpedoes and torpedo-boats are taught, and the officers thus gain an experience in handling vessels of high speed and the use of modern weapons and appliances of war, in which so great and rapid changes are constantly being made, under circumstances which closely resemble those of actual warfare.

As a result of the maneuvers of the French and English squadrons of evolution, it has been demonstrated that the type of torpedo-boat (100 to 110 feet in length) hitherto accepted as capable of efficient service upon the open sea is too small for such work, and that its rôle in war must be restricted to operations along the coast or harbors. An increase of size has consequently been demanded, and torpedo-boats intended for a service extending beyond the limits of the coast line are built of lengths varying from 130 to 150 feet and in displacements from 90 to 150 tons. (A still larger boat has been built for the Japanese Government; length, 166 feet.)

The Department in July last appointed a board to examine and report upon the adaptability of the Stiletto, a boat built by Herreshoff Brothers, of Bristol, R. I., for service as a torpedo-boat. The board reported that the Stiletto embodied the qualities which a modern torpedo boat should possess, although they suggested certain improvements for future boats.

The steam trials of the Stiletto were exceedingly satisfactory, and when the small type (but 90 feet length) of the boat is considered they compare most favorably with those of boats built abroad.

On July 2, with 13 men on board and about a ton of coal, displacement about 28 tons, this boat made four runs over the measured mile in a rough sea and fresh wind. The average speed was 22.12 knots. On July 30 six runs were made, with 12 men on board and the same amount of coal. The average speed was 22.89 knots. The same day

the boat made a run of 59 knots, at an average speed of 19.62 knots. On the 7th a run to Block Island and back was made in a rough sea, and an average speed of 16.2 knots for the run was obtained.

Experiments have been recently made which indicate that for vessels at anchor or under way at low speed, and in smooth water, protection against torpedoes may be found in the use of the torpedo-nets, now being generally adopted for armored vessels. The development of the torpedo is, however, receiving constant attention and expenditure of money for its improvement, and it must be reckoned as one of the most formidable weapons, offensive and defensive, of naval warfare.

An explosion of a 43-ton gun on board the Collingwood, in May last, has given rise to much criticism and discussion of the modern type of gun. It is a satisfaction to know that the guns of 6 and 8 inch calibers recently constructed under the Bureau of Ordnance have withstood their tests satisfactorily, and have given ballistic results unsurpassed, if equaled, by foreign-built guns.

Congress at its last session appropriated for a pneumatic dynamite-gun-boat. The conditions were for a considerable time thought to be too severe for any contract to be made, with the guarantees required. It can now be stated, however, that there is reasonable ground to expect that a contract can be entered into under the stipulations of Congress. The result of the experiment is looked to with much interest by all familiar with the subject.

REPORT OF THE ADMIRAL OF THE NAVY.

The annual report of Admiral David D. Porter presents, as usual, a number of interesting and valuable considerations in reference to various important subjects bearing upon the welfare of the Navy, and calls especial attention to the merits of the Herreshoff system of boilers; the weakness of the Navy in the matter of torpedo boats; the advantages of a considerable degree of sail-power in modern cruisers; the expediency of administrative reorganization; the necessity of providing life-boats for ships of war, and of revising the existing allowance of stores; and the want of an iron-ship building yard. The Admiral gives emphatic commendation to the course pursued at the Naval War College, and recommends its further development by the employment of suitable vessels for practical exercise.

SALES OF PUBLIC PROPERTY

No public vessels have been sold during the past year. From the sale of public property under control of the Navy Department, from November 1, 1885, to November 1, 1886, the sum of \$82,224.53 has been covered into the Treasury as "miscellaneous receipts" and \$28,050.91 returned to the several appropriations to which the property pertained, making a total of \$110,275.44.

Detailed statements of materials sold will be found with the reports of the Bureaus.

NAVAL ACADEMY.

The Naval Academy is now in charge of Commander W. T. Sampson, who relieved Capt. F. M. Ramsay as Superintendent September 9, 1888.

The report of Commander Sampson points out certain disadvantages resulting from the present so-called "six-year course" at the Academy, and proposes that the length of the course be fixed at four years. Under the present arrangement the course consists of four years passed in study at the Academy and two years afloat. At the end of the six years, the naval cadets, who are distributed in cruising ships all over the world, are ordered home to pass a final examination, upon the completion of which selections are made to fill the vacancies in the service, and those in excess of the vacancies are honorably discharged. The latter are thus compelled to pass two years afloat in training for a service which they are not eventually to enter, and they lose two valuable years which might be employed in preparation for a private career. The system is also attended with great expense to the Government, and the Congressional districts, by a fictitious prolongation of the term of a cadet's service, remain for two years practically unrepresented. A further and very serious disadvantage lies in the fact that by compelling the candidates for different corps to follow for so long a period a uniform course of study no opportunity is given for the special professional training required to secure efficiency in the members of the respective corps.

To remedy these evils a change in the law is suggested by which the length of the course shall be reduced from six to four years, and the cadets at the beginning of the final year shall be classed in two divisions, pursuing during this year separate courses of professional study, adapted to that branch of service which they will probably enter. The selection of cadets to fill vacancies can then be made at the end of the final year, and those not selected will at the same time receive their certificate of graduation and their honorable discharge from the service. As the discharged cadets will have received a gratuitous education without having rendered any service, and as the gain of two years for a start in business is worth much more than the present allowance of a year's pay, the necessity of this further addition to the bounty of the Government will disappear. It is estimated that these changes, so desirable for the Government, for the Navy, and for the discharged cadets, will result in a saving of \$36,000 per annum.

MARINE CORPS.

The report of the commandant of the Marine Corps, Col. Charles G. McCawley, describes the condition of the corps and calls attention to the necessity of an appropriation for the repair of barracks at Mare Island.

The recommendation made last year of an appropriation of \$1,000 for the purchase of tents and camp equipage is renewed. The want of this outfit was severely felt when the Isthmus expedition was sent out in the spring of 1885, and the small outlay required for the purpose would be amply repaid by the increased efficiency of the corps.

ADMISSION OF APPRENTICES TO THE NAVAL ACADEMY.

The training system now established in the Navy has resulted in raising the character and tone of the corps of enlisted men, and a high standard of intelligence, readiness, and efficiency prevails in the class of boys who are entered as naval apprentices. Under these circumstances, the question has arisen whether, in order to furnish an incentive to ambition and a proper reward for extraordinary capacity and effort, some provision should not be made for affording to the most deserving among our apprentice boys an opportunity of entering the grades of commissioned officers. The Department is now giving this subject the careful consideration which it deserves. It is certainly in accordance with the democratic spirit of our institutions that every career and every office of honor or trust in the service of the American Government should be open to every American boy, and that no barriers should be placed in the way of advancement other than those created by the unworthiness of the candidate. It is the desire of the Department that the naval service should not be open to any charge of exclusiveness, as the sole exception to this sound and wholesome principle of our national policy. To this end it would recommend that measures be taken by which, under proper safeguards, admission to the Naval Academy might be given to a limited number of apprentices, who should then be subjected to the same course of training and examination as the other cadets, and who, under the application of a uniform test, should stand or fall solely according to the strength or weakness of their own merits. Under such restrictions, it is believed that the opening of the quarter-deck to the apprentices will not only afford an additional stimulus to effort, but by strengthening the bond between officer and enlisted man will react favorably upon both branches of our naval *personnel*.

BUREAU OF EQUIPMENT AND RECRUITING.

The Chief of the Bureau of Equipment and Recruiting, Commander Winfield S. Schley, reports upon the operations of his Bureau during the past year, including the purchase of coal and hemp, the manufacture of cordage, chain, anchors, and galleys, the preparation of rigging, sails, awnings, and hammocks, the naval-apprentice training system, pension cases, and the condition of the force of enlisted men.

The report describes in detail the satisfactory working of the training system, and calls attention to the needs of the station at Newport especially of a hospital and natatorium, and of completing the exten-

sion of the sea-wall and dredging the channel. It is recommended that, in view of the necessity of training apprentices for service on board steam vessels, two composite bark-rigged steamers of about 900 tons displacement should be built for the use of the training service.

In reference to enlisted men, attention is called to the recommendations of last year, advocating legislation for the improvement of the condition of seamen, by the establishment of savings banks and homes on receiving ships, and by providing for retirement after thirty years' service. Bills looking to legislation on these subjects passed the Senate at the last session of Congress, but have thus far failed of action in the House. There is no doubt that the passage of these measures will do much to improve the morale of the enlisted men of the Navy. Other subjects are mentioned upon which legislation appears to be needed, especially the provision of an outfit for apprentices upon enlistment, the authorization of the administration of oaths by commissioned officers of the Navy, the establishment of a uniform system of punishment for minor offenses committed on shipboard, and a specific provision for naval seamen employed at the Naval Academy, in the Coast Survey, and in the Fish Commission, in order that the limited complement now allowed for the cruising ships of the Navy may not be exhausted by the supply of men for these subsidiary purposes.

BUREAU OF YARDS AND DOCKS.

The report of the Chief of the Bureau of Yards and Docks, Commodore D. B. Harmony, again presents a graphic description of the condition of decay into which our navy-yards, with their wharves and buildings, have fallen, and states that in the absence of an increased appropriation it becomes only a question of time when our yards will be unequal to the performance even of the ordinary current work of repairing and fitting out the few vessels that we now have. Attention is also called to the extreme inadequacy of the present facilities for docking naval vessels, there being only three dry-docks belonging to the Government on the Atlantic coast. It is recommended that appropriation be made for the construction of dry-docks at New York, League Island, and Norfolk, to meet the growing demands of the service.

The works undertaken at the New York and Mare Island yards have been carried on during the past year with economy and success.

In reporting the generally satisfactory condition of the Naval Asylum, the Bureau renews its recommendation for the erection of a small detached building for a kitchen and laundry, the present arrangements for these purposes being productive of great inconvenience and discomfort.

BUREAU OF PROVISIONS AND CLOTHING.

The report of Paymaster E. N. Whitthouse, in charge of the Bureau of Provisions and Clothing, gives an account of the work of the Bureau during the past year, from which it appears that the introduction of

more careful business methods and the gradual diminution of the excessive amounts of provisions, clothing, and other stores heretofore kept on hand, have made a material reduction in expenditure. The covering into the Treasury of nearly one-third of a million dollars of surplus clothing and small-store funds will remedy abuses made possible heretofore by the existence of excessive balances on hand. In the purchase of supplies gratifying results have been obtained in the general reduction of prices and the improvement of the quality of the stores. The report also calls attention to the fact that the sales of exchange in the negotiation of drafts on the Department and on its agent in London by pay officers have netted a considerable premium instead of the loss which has usually been consequent upon these transactions.

The operations of the clothing factory at the navy-yard, New York, continue to show progressive results.

The report recommends that the duties of receiver and assistant receiver of public stores at the several yards and stations should be entrusted to junior disbursing officers of the Navy, in view of the fact that in order to secure proper accountability the position should be filled by a bonded officer, and that the pay of an assistant paymaster on such duty would be but little in excess of that of the present receiver. This will involve an increase of the existing number of assistant paymasters from seventeen to twenty-seven. It is further suggested that the new appointments might, with great advantage, be made from the graduates of the Naval Academy, the number of these latter being always in excess of the vacancies in other corps of the service.

It is also recommended that the laws in reference to bonds of disbursing officers should be so modified as to authorize the acceptance of corporate sureties of undoubted solvency, the conditions of an officer's life, with its frequent changes of duty and station, making it at times exceedingly difficult to secure private sureties in the periodical renewal of bonds.

BUREAU OF CONSTRUCTION AND REPAIR.

The report of Naval Constructor Theodore D. Wilson describes the operations of the Bureau of Construction and Repair during the past year. The steel cruisers *Atlanta* and *Boston* are at the New York navy-yard, where they have been docked, cleaned, and painted, and sundry alterations and additions have been made to them. The *Chicago* is still at Chester, and the work upon her is now being rapidly pushed towards completion. The amount appropriated by the act of July 26, 1886, will not be sufficient to finish these vessels, and an additional appropriation of \$56,000 has been asked for, which it is expected will be adequate for the purpose, if no further alterations or additions are recommended by the Naval Advisory Board.

During the past year the second-rate paddle-wheel steamer *Powhatan*, the third-rate screw steamer *Wachusett*, and the tug *Pilgrim*

have been condemned. The Tennessee, the only first-rate vessel in active service, is so decayed that she can remain in use but a few months longer. The Lackawanna and Shenandoah are in such a condition that they cannot be repaired for service under the existing law, although the Lackawanna may be made a suitable receiving ship for the Mare Island navy-yard. Of the other second-rates now in the service, it appears that three can probably be continued in use for ten years longer, two for six years, and three for five years. Of the sixteen wooden third-rates, one, the Mohican, will be available for ten years, seven for six years, and the remaining eight for only five years. The Board of Constructors convened in August last for the purpose of examining into the present condition of the four double-turreted monitors and preparing plans for their completion has not yet finished its labors. As soon as the plans are completed the new work will be begun. Attention is called to the necessity of putting the navy-yards in condition to meet any demands that may be made upon them in reference to the construction of ships of war in an emergency, and especially in the matter of improved docking facilities.

In view of the increased demands upon the Bureau in the preparation of designs for new ships, it is necessary that the force of draughtsmen at its disposal should be enlarged, and for this purpose it is recommended that provision be made for a chief draughtsman, and for four additional draughtsmen, estimates for which have been submitted.

BUREAU OF STEAM-ENGINEERING.

The report of Engineer-in-Chief Charles H. Loring, Chief of the Bureau of Steam Engineering, describes in detail the operations of his Bureau and the condition of the machinery of all the vessels in the service. Designs and specifications have been prepared for the machinery of the ships appropriated for by the act approved March 3, 1885. It is the opinion of the Bureau that in order to obtain maximum results with the new machinery it will be necessary to organize a special fire-room force, drilled and disciplined for the purpose, to be employed on the trials of the several ships for record of speed and horse-power.

Attention is called to the necessity for a new boiler-shop, supplied with the requisite tools and appliances, at the New York navy-yard.

BUREAU OF ORDNANCE.

The report of Commodore Montgomery Sicard, Chief of the Bureau of Ordnance, shows a steady progress in the work of the Bureau. The satisfactory character of the results accomplished, in the multitarious details of this branch of naval supply, requiring care, accuracy, and mechanical ingenuity in the highest degree, appear to call for special commendation.

has directed the Bureau, through a proper board, to make continued investigations regarding such torpedoes as appear adapted to naval use.

During the greater part of the year, the Torpedo Station at Newport was in charge of Commander W. T. Sampson, who was recently relieved by Commander C. F. Goodrich. The issue of torpedoes and torpedo-fittings to ships has been continued, and the regular courses of instruction have been successfully pursued. In view of the special course now provided for officers who are qualified to take it, it is not deemed advantageous to increase the length of the general course. The report points out certain wants of the institution, in reference to the sea-wall, ferry-landings, and steam launches, which require a small outlay of money.

The great increase in the work of the Bureau absolutely requires that additions should be made to its clerical force, for which provision has been asked in the estimates.

BUREAU OF NAVIGATION.

The Chief of the Bureau of Navigation, Commodore John G. Walker, describes the operations of his Bureau and of the offices connected therewith, including the Naval Observatory, Hydrographic Office, Nautical Almanac Office, Naval War College, and Department Library. Careful observations and experiments have been made during the year with compasses, especially in reference to the magnetic condition of the new steel cruisers. The compass testing-houses will shortly be completed and ready for use. Competitive trials of American chronometers have been made, which form the basis of selection in procuring those needed for the Navy. Incandescent electric-light plants have been placed in the Atlanta and Boston, and bids have been invited for installing a double plant in the Chicago. Deep-sea sounding-machines have been supplied to the Juniata and Essex, the usual additions have been made to ships' libraries, and two valuable professional papers have been issued.

It is recommended that the appropriation for the purchase of books for the Department library be restored to its original figure, the amount now allowed being insufficient for the purpose.

The surveys of the coast of Lower California have been continued by the Ranger, and valuable charts embodying the results are now in course of preparation. Upon the completion of this work the Ranger will be employed in the examination of reported dangers to navigation in the Pacific Ocean. It is proposed that the Thetis, now fitting out as a surveying ship, shall be occupied with similar duties.

The revision of the general signal book has been completed, and only awaits a practical trial. As this requires that a number of vessels shall exercise at sea in company for a certain length of time, it is recommended that four of the larger tugs be fitted out, officered and manned as a squadron of evolutions, which would not only accomplish the im-

mediate object desired, but would be of great service in developing a branch of naval training now considered indispensable by all foreign Governments.

Attention is called to the steady reduction in recent years in the appropriations for the general purchase of navigation supplies, and to the consequent inability of the Bureau to meet in this respect the necessary wants of the Naval Establishment. It seems to be beyond question that adequate provision should be made for keeping our cruising ships supplied with whatever is essential to the requirements of modern navigation.

The recommendation that provision be made for an additional clerical force to carry on the work of publication of the Naval War Records is renewed. The importance of this work has been fully pointed out in my previous report, and its needs are again commended to the attention of Congress.

HYDROGRAPHIC OFFICE.

The report submitted by the hydrographer, Commander John R. Bartlett, describes the operations of the Hydrographic Office during the past year, in continuation of its valuable work as an ally of the maritime community, and as a medium for the collection and dissemination of nautical information. Its influence has been largely extended by the high character of its publications, and especially through the agency of the branch offices. The extent and importance of their work may be gathered from the fact that during the past year 12,785 vessels were visited and information was given to 30,969 persons. By means of the voluntary assistance thus given to the maritime interests of the country, the latter are brought into closer relations and stronger sympathy with the navy.

The Office requires an increase of appropriation to complete the set of American charts covering the navigable waters of the globe. Its list embraces only 350 engraved charts, while that of the British Admiralty numbers 3,000. We are therefore mainly dependent for our supply upon foreign sources, which may at any time be cut off.

In view of the great number of floating wrecks menacing the safety of ships in all parts of the North Atlantic Ocean, and the inability of one nation to keep the ocean clear of these derelicts, the hydrographer recommends an international convention, which shall assign portions of the ocean for patrol to each maritime power. It is also recommended that provision should be made by law for the inspection of charts and navigating instruments of mercantile vessels, from the inadequacy of which marine disasters are liable to occur. The inspection, similar to that now required of hulls and machinery, could readily be conducted by the branch offices of the Hydrographic Office.

The most serious want of the Office at the present time is a new building. As was explained in the report of last year, the present ar-

rangement is incompatible with the successful management of the Office, and another year's experience only furnishes additional proof of its inadequacy.

NAVAL OBSERVATORY.

The report of the Superintendent, Commander Allan D. Brown, presents a statement of the details of astronomical work performed with the various instruments during the year and of the present distribution of duties. The time service of the Observatory continues to prove its usefulness to the shipping and commercial interests of the country, and applications for the erection of time-balls at various points have been received. Hitherto time-balls have been dropped at New York, Philadelphia, Baltimore, Washington, Hampton Roads, Savannah, and New Orleans. As the ball service and the necessary telegraph service incident to the system are now largely voluntary, an estimate under the head of "maintenance of time service" has been submitted to provide for a proper remuneration for the work.

In accordance with authority contained in the act approved July 26, 1886, steps have been taken to commence the erection of the new Naval Observatory on the site purchased by the Government for that purpose.

MEDICINE AND SURGERY.

The report of the Surgeon-General of the Navy shows the satisfactory condition of the Bureau of Medicine and Surgery. The business of the office is conducted with exactness and efficiency under the reduced appropriations of the year. I commend the request for the restored amounts of estimates under heads of Medical Department, Repairs, and Contingent of Bureau.

The recommendation of the Fourth Auditor of the Treasury in his present report, "That some system of property accountability be instituted by which an audit of the accounts of officers in charge of public property may be had," has been anticipated by this office; and in the Instructions for Medical Officers of the Navy, issued by my order at the beginning of the present fiscal year, such a system of accountability as to the smallest details is effectually established.

The necessity for an additional clerk in the pension division of the office is repeated with increased urgency. It is not right that the appeals of the disabled sailors of the Navy or of their widows and orphans should be delayed by the failure of the Government to supply the clerical force required for the examination of their claims for pension. The medical records of the Navy are the careful work of its medical officers, and afford full evidence of the disabilities occurring in service, but there is only one clerk allowed for the work of searching them.

The temporary wooden building at the quarantine station in Penobscot Bay is sufficient for present uses, but it should be replaced by a permanent structure whenever Congress will grant the money.

The statement of the condition of the Medical Corps of the Navy, its reduced numbers, the frequent resignations of the younger medical officers, and the apparent inability to obtain desirable and competent men for that important service, is commended to the attention of Congress for such improvement in the advantages of that department as may be considered wise. It should not be less attractive and efficient than the corresponding department of the Army.

NAVAL WAR COLLEGE.

The second session of the Naval War College, now in charge of Captain A. T. Mahan, was attended with the most satisfactory results. It is to be noticed that the college represents the first systematic attempt that has been made in the Navy to give officers a higher training in the art of war, which is the end and aim of their profession. Formerly it was perhaps hardly required, but the increased complexity of naval science at the present day, and the great variety in the operations of naval war and in the mechanical instruments by which they are carried on, make this hitherto-neglected branch of professional education an indispensable element in naval efficiency, a fact which is now recognized by nearly every Government in the world.

During the last session of the college courses of lectures were given upon naval evolutions, naval gunnery, the history of naval operations, international law, military strategy, naval hygiene, the preservation and care of iron ships, and the duties of the general staff. A striking feature of the programme consisted in parallel courses upon the science of coast defense, conducted by Commander Goodrich, of the Navy, and Captain Bixby, of the Engineer Corps of the Army, thus securing a presentation of the subject from its two essential standpoints. The object of the lectures, to present in a compact form the latest developments in modern war, was supplemented by practical exercises with guns and with boats.

The importance of the work to be done by the college can hardly be overestimated. Additional courses of lectures are now in preparation for the coming year, upon other subjects bearing directly upon the art of war, and embodying those results of recent investigation which are inaccessible to the service in general.

As opportunity offers, applications from officers for permission to attend the college course will be granted, and it is hoped that in time its scope may be gradually enlarged in the direction of practical training with modern ships and modern guns, as far as the resources of the service will permit.

WAR VESSELS IN COMMISSION.

The North Atlantic Squadron remained under the command of Acting Rear-Admiral James E. Jouett until June 15, 1886. Rear-Admiral Stephen B. Luce assumed the command on the 24th of that month.

The vessels composing this squadron are at present the Tennessee (flag-ship), Galena, and Yantic. The Swatara has been put out of commission at the navy-yard, Portsmouth, N. H. The Brooklyn has been ordered to the Asiatic Station, and will be the flag-ship of the commander-in-chief. The Alliance has also been detached from the squadron and is now on her way to the South Atlantic Station.

During the past year the vessels of this squadron have cruised through the West India Islands; along the northern coast of South America, and the coast of North America as far as the Gulf of Saint Lawrence.

In February last the Galena seized, at St. Andrew's Island, the American steamer City of Mexico, for violation of the laws of neutrality, having on board a party of filibusters, whose intention it was to land on the coast of Honduras. A prize crew from the Galena was put on board the City of Mexico and that vessel taken to Key West and turned over to the United States marshal.

In March the squadron, which then consisted of the U. S. S. Tennessee, Galena, Swatara, Brooklyn, Yantic, and Despatch, proceeded in squadron from Key West to Pensacola, Fla., for fleet exercises, squadron drills, target practice (ashore and afloat), and landing parties. A brigade was landed and remained on shore in camp several days, during which time the officers and men were instructed in the various duties attending the landing and encampment of a naval force. Both officers and men gained much valuable experience during these exercises.

On the 28th of October the following vessels, viz, Tennessee, Alliance, Yantic, Minnesota, Portsmouth, Saratoga, Jamestown, and Despatch, under the command of Rear-Admiral S. B. Luce, participated in the ceremonies attending the inauguration at New York of the Statue of Liberty Enlightening the World.

The South Atlantic Squadron is now under the command of Acting Rear-Admiral Daniel L. Braine. This officer assumed command of the squadron on the 6th of October last, taking the place of Rear-Admiral Earl English, who was detached November 27, 1885. The squadron consists at present of the Lancaster (flag-ship) and Tallapoosa. The Alliance is now *en route* to re-enforce this squadron. The Lancaster during the past year has visited the Comoro Islands, Zanzibar, Madagascar, and Mozambique. She was ordered on this duty with a view of investigating complaints made to the Department of State by American citizens residing in the localities mentioned. Having completed this service she returned to Rio de Janeiro. The Nipsic has been detached from the squadron and put out of commission at the navy-yard, New York.

The Asiatic Squadron is still under the command of Rear-Admiral John Lee Davis. This squadron is now composed of the Marion (flag-ship), Omaha, Monocacy, and Palos. The Trenton and Alert have been ordered home and put out of commission; the former at the navy-yard,

Norfolk, Va., and the latter at the navy-yard, Mare Island, California. The Ossipee is now on her return home after a three years' cruise. The squadron will be re-enforced by the Brooklyn and Essex, now *en route* to Hong-Kong. The vessels during the past year have cruised in the waters of China, Japan, Corea, and to the Caroline Islands, affording protection to our citizens in these localities.

The Pacific Squadron remains under the command of Rear-Admiral E. Y. McCauley. It consists of the Hartford (flag-ship), Mohican, Iroquois, Adams, and Pinta. The Vandalia and Juniata are now *en route* to Valparaiso to join this squadron. The Shenandoah has returned to the United States and been put out of commission at the navy-yard, Mare Island, California.

The vessels during the past year have cruised along the west coast of Mexico, and Central and South America. The Pinta has been occupied exclusively in cruising in Alaskan waters. The Mohican sailed from Callao in March last for a cruise to the islands of the South Pacific. She has been detained for some time past in the Samoan group, at the request of the Department of State, for the protection of American interests, owing to the disturbed condition of affairs in Samoa.

The European Squadron remains under the command of Rear-Admiral Samuel R. Franklin, and consists of the Pensacola (flag-ship) and Quinnebang. The Kearsarge is now on her return to the United States, and will probably be put out of commission.

During the past year the vessels of this squadron have cruised in the Mediterranean, and along the coasts of France, England, Holland, and Belgium.

The training squadron consists of the New Hampshire (receiving-ship), stationed at Newport, R. I., Minnesota, stationed at New York, and the cruising ships Portsmouth, Saratoga, and Jamestown. During the past year the Portsmouth, Saratoga, and Jamestown have made a cruise to the West India Islands, and the two former also to Lisbon and Madeira. In May last the Jamestown was temporarily detached from this squadron, and used for a practice ship for the summer cruise of the Naval Cadets in place of the Dale, condemned.

The vessels of the Navy on detached service are the Despatch and Dolphin, on the Atlantic coast; the Ranger, on the Pacific, now engaged in surveying and sounding on the coast of Lower California, and the Michigan, on the Northwestern Lakes. The Powhatan has been put out of commission at the navy-yard, New York. This vessel has been on special service for many years. During the past winter she made a cruise to the West India Islands, and rendered valuable assistance to the inhabitants of Key West during a disastrous fire at that place in March last.

WM. O. WHITNEY,
Secretary of the Navy.

P A P E R S
ACCOMPANYING
THE REPORT OF THE SECRETARY OF THE NAVY.

REPORT OF THE ADMIRAL.

WASHINGTON, D. C., *November 15, 1886.*

SIR: Agreeably to your desire that I should prepare a report by the 15th instant embodying suggestions for promoting the efficiency of the Navy, I have the honor to submit the following, which, owing to the brief time available for writing it and the state of my health, may seem to you very imperfect.

There are at the present moment so many points connected with the subject in hand that much consideration is necessary in discussing a matter of such importance. The theme is very familiar to me, but it requires time to put my views in proper shape.

Last year I had the honor to submit, in my annual report, a recommendation to repair the iron-clads now laid up at City Point, Va.

In rehabilitating the Navy there is no subject worthy of more consideration than that of home defense. I consider it of vastly more interest at the present moment than the construction of cruisers, and the vessels referred to are so well adapted to the protection of our coast that it seems a pity they should be left in the condition they are to-day.

During the civil war these iron-clads proved themselves very effective in bombarding forts, blockading harbors, and keeping the sea in boisterous weather when required to do so, performing almost any duty that could be required of them. In the operations in Charleston Harbor these vessels, including the *New Ironsides*, were struck 1,278 times by the heaviest shot then in use, and although occasionally disabled by a severe fire they were never so much crippled that they could not go into battle again after a day or two's repairs. To this moment the hulls of these iron-clads bear witness to the ordeal they underwent. The heavy indentations still remaining, without doing any actual damage, attest their strength and endurance.

If these vessels were now armed with heavy rifled-guns they would be as formidable as they were in 1863, '64, and '65.

Lying in their present condition at City Point the iron-clads are a considerable expense to the Navy, as it is necessary to keep officers and men on board to take care of them, while they are not a particle of use to the country; but if put in proper repair two of them would be quite equal to either of the large monitors *Miantonomoh*, *Monadnock*, &c.

The following is a list of the iron-clads referred to:

Name.	Estimated cost of repairs.	Time required.
Saugus	\$100,000 00	Sixty days.
Wyandotte	Small outlay.	
Montauk	23,900 00	
Jason	36,113 00	
Nahant	35,806 00	Do.
Ajax	15,710 00	Thirty-five days.
Canonicus	19,502 00	Forty-five days.
Catakill	6,625 00	Thirty days.
Lehigh	10,526 00	Six weeks.
Mahopac	7,853 00	Five weeks.
Manhattan	10,445 00	Six weeks.

The amount required to repair the Saugus may seem rather large, but it must be remembered that after the repairs are finished the Saugus will be equal to a new vessel and the expense incurred would not be half as great as would be required to build a new iron-clad.

When these iron-clads are repaired they could mount 22 heavy rifled guns and could force their way past any forts such as are placed to defend our principal seaboard cities.

It was a great satisfaction to officers of the Navy when money was appropriated by Congress for finishing the double-turreted monitors, thus giving some security against the invasion of our harbors by any tenth-rate naval power which might happen to possess a couple of British-built iron-clads. Only a few years ago one of these minor powers boasted that it could lay San Francisco and New York under contribution. I am sorry to say that at the time this might easily have been done.

We will not be entirely free from the danger of such an invasion until the double-turreted monitors are finished and have their guns mounted, and it can readily be judged how formidable an addition the single-turreted monitors would be if properly repaired, fitted, and armed for the defense of our coast.

All foreign naval powers have vessels of corresponding class to the above which go to swell the aggregate of their resources, but they are always kept in perfect repair.

The country has been much exercised of late over the building of the steamers Chicago, Boston, Atlanta, and Dolphin, which were commenced in 1883. The three vessels first named were intended to represent main types of unarmored cruisers considered as indispensable components of a naval force to be used for general service on the high seas.

The Chicago was to be an example of the largest unarmored fighting cruiser in existence, and it was supposed at the time she was contracted for that she would have no superior in the combination of endurance, speed, and armament.

In the Boston and Atlanta it was intended to develop not only the highest rate of speed but also their fighting qualities by placing the battery of each in a central superstructure on the spar-deck, carrying the sail power amidships, and giving the forward and after guns unlimited sweep over bow and stern.

So far the new vessels have given no evidence of great speed, and it is feared by those most interested in the matter that they never will, which deficiency will render them useless as commerce-destroyers,

although they may serve the purpose of guarding our interests among the smaller powers which have no naval force.

The building of these vessels was a step in the right direction, as they were planned with the idea of having certain classes of ships that would be most useful in a navy like our own, and out of the numerous experiments made by naval powers throughout the world to evoke a system which would render our Navy less subject to criticism than that of any European nation.

For the past twenty years we have contented ourselves with watching the nations of Europe build ships, sending officers abroad to examine the improvements which have been made in construction and ordnance. We have obtained drawings of almost every important vessel built in Europe, but in spite of our great experience, acquired with so little expense, we commit more mistakes than were committed by any of the European states in their efforts to build up a navy.

I beg leave to draw your attention to the following list of vessels which have been projected. You will notice what a difference there is in tonnage, displacement, horse-power, &c., and that none of the classes seem to assimilate sufficiently to form a system such as is absolutely necessary in a naval force.

Name.	Length.	Beam.	Draught.	Displacement.	Indicated horse-power.	Estimated speed.	Coal capacity.	Heavy guns.	
	Feet.	Feet.	Feet.	Tons.		Knots.	Tons.	No.	Inch.
Chicago	315	48	19	4,500	5,000	18	940	14	.....
Boston	270	43	17	2,000	2,500	14	680	8	.....
Atlanta	270	42	17	3,000	3,500	14	580	8	.....
Dolphin	240	32	14	1,500	2,300	15	370	1	.....
Gunboat No. 1.	220	30	14	1,700	{ 2,200 18,300 }	18	490	8	8
Gunboat No. 2.	175	31	11.10	870	{ 2,000 11,350 }	-----	160	4	6
Newark	310	49.14	18.9	4,083	{ 6,000 18,500 }	18	850	12	8
Charleston ...	300	48	18	3,720	7,650	18.9	-----	{ 2 8 }	{ 10 8 }
Baltimore	335	48½	19½	4,400	{ 7,500 110,500 }	{ 18 19½ }	900	{ 4 8 }	{ 8 12 }

* Natural.

† Forced.

We require for the Navy the following classes of vessels which will at least enable us to show that we have a system, even if our ships do not equal in speed those of foreign powers.

The first class should be represented by a vessel not less than 6,000 or more than 7,000 tons, and able to make for a few hours a speed of 19½ knots.

The second class should be a vessel of not less than 4,500 or more than 5,000 tons, able to make for a few hours a speed of 19 knots. Vessels of the second class to serve as flag-ships on foreign stations.

The third class should be a vessel of 3,000 tons, able to make for a few hours a speed of 18 knots.

It may seem to those who have not closely studied the question that the amount of speed I have estimated is preposterous. It has been asserted that the speed of 18½ knots attained by foreign ships of war on their trial trips over a measured mile is never equaled after the vessels are put in commission. To this I must reply that such speed is familiar to the transatlantic racers, which attain it on every voyage. It is not probable that any war vessel in the world could overtake one of these last-named vessels.

There is nothing in which improvement is made so slowly as in the speed of our naval vessels, for the reason that we make no advance in building steam-engines, but have followed in a beaten track for many years. We adhere to the old-fashioned boilers that involve the consumption of an amount of coal not suited to a nation like ourselves, since we have no coaling stations scattered around the world like Great Britain, France, and Germany.

We have in this country a man of great genius engaged in the construction of marine engines and boilers, but we are blind to his merits. I allude to Mr. Herreshoff, president of the Herreshoff Marine Building Company, of Bristol, R. I. He is blind also—optically—but gifted with remarkably clear sight as regards the steam engineering of vessels of war.

The Herreshoff coil boilers are to-day perhaps the most famous in the world.

Mr. Herreshoff's last achievement was the Stiletto, a vessel of 28 tons, which developed a speed of 27 miles an hour, exceeding anything ever attained by our fastest river boats.

Although this gentleman has succeeded in obtaining such a high rate of speed, he has received little encouragement from the Government to induce him to adapt his engines and boilers to a larger class of vessels. Engineers generally, both in and out of the Navy, seem opposed to the Herreshoff system, although I have yet to hear any good reasons for their being so; but one of the most able of the profession we have ever had in the Navy, Chief Engineer B. F. Isherwood, is a strong advocate of it.

To obtain the great speed necessary for a commerce-destroyer the steam power should exceed the displacement as two to one; or actually a vessel of 4,000 tons displacement should have over 8,000 horse power.

It has been found almost impossible to supply a vessel of war with a sufficient number of boilers of the ordinary type to drive her rapidly through the water and at the same time give space for a large amount of coal, provisions, ordnance stores, ship's stores, clothing, &c.

This difficulty is obviated in the large merchant steamers crossing the Atlantic, which require only a few days' coal, provisions, &c., and can therefore use the heaviest boilers and as many of them as they please.

It is believed by the best authorities that the Herreshoff boiler will furnish a given quantity of power with less than half the weight of any other type of boiler now in use in this country, especially when combustion is forced to the maximum by blowing air into a closed fire-room.

Second. It can be properly used with a higher rate of combustion per square foot of grate surface than any other type of boiler, owing to its entire freedom from "foaming" at all rates of combustion, and to the impossibility of the heat forcing the water from the metallic surfaces and burning them out.

Third. In a vessel of a given displacement, with a carefully constructed air-tight fire-room and adequate blowers, blowing into it, twenty indicated horse-power can be obtained from each square foot of grate surface during the usual trial test.

Fourth. The Herreshoff boilers can be safely used up to a pressure of several hundred pounds per square inch. In experiments made by Chief Engineer Isherwood he used these boilers at a pressure of 260 pounds, and was prevented from sending the steam up higher only for want of a steam-gauge to indicate a higher pressure.

Fifth. The Herreshoff has much less height than other boilers, which will enable it to be placed below the water line in small vessels, or those

of moderate draught of water—an important consideration in vessels of war.

Sixth. The Herreshoff engine can be safely worked at from five to six hundred revolutions per minute. The high reciprocating speed of piston, in connection with a high boiler pressure, allows the engine to be made exceedingly light in proportion to the power it develops. There is no other system of machinery besides the Herreshoff and the Belleville that would give the power required to develop great speed in ships of war, or the space and weight generally allotted to boilers and engines.

Heretofore we have had no experience with the Herreshoff boiler, using several boilers to supply one engine; but such is my confidence in the ability of the Messrs. Herreshoff that I have no doubt of the success of any plan they may recommend. Their designs are as notable for originality and propriety of adaptation as for their success.

There is only one question that seems liable to arise, owing to the multiplicity of boilers; that is the feeding of several boilers to supply one engine; but that is a mechanical difficulty which Mr. Herreshoff claims he can overcome.

We have now reached a point where the greatest speed is demanded for a ship of war. A vessel making but 15 or 16 knots would be useless as a cruiser in time of war, for such a vessel could catch nothing and could not escape from a superior force.

To gain the necessary speed it is requisite to decrease the weights and increase the power, which can only be done by a resort to the Herreshoff system, in which the boiler does not weigh more than half as much as the Scotch boiler and the engines not more than two thirds.

The Herreshoff and the Belleville are the only types of multitubulous boilers which have as yet been applied to sea-going vessels. So far as I am able to judge, the Herreshoff system is in advance of the other, although the Belleville boiler has been carefully fostered by the French Government, while the Herreshoff boiler has received no particular encouragement from the Government of the United States beyond the purchase of some steam launches, which have proved themselves the best in our Navy.

The experiments made in France with the vessels of war *Voltigeur* and *Milan* have removed all doubts as to the feasibility of the multitubulous system of boilers, and the success attained by the Messrs. Herreshoff indicates that their methods have passed beyond the realm of experiment.

Up to the present time France has obtained for two of her vessels of war greater speed than any other naval power, even surpassing Great Britain, the power which claims the highest speed.

The gunboat *Milan*, built on the same principle as the dispatch vessel *Voltigeur*, is 303 feet in length, and 33 feet beam, with a displacement of about 1,600 tons. With a draught of 12 feet the *Milan* has attained a speed of 19½ knots with a developed horse power of 4,000.

In the Herreshoff boiler this country possesses something superior to the Belleville boiler of France, and it remains to be seen which of the two nations will take the lead in perfecting a safe and desirable marine boiler with a reduction of nearly 50 per cent. as compared with the weight of the Scotch type of engine and boilers, and greatly increasing the efficiency of vessels of war.

As the *Milan* with a length of 303 feet has attained a speed of 19½ knots with 4,000 horse-power, I see no difficulty in attaining a speed of

21 or 22 knots in a vessel 260 feet between perpendiculars with 5,000 horse-power and very much finer lines.

I submitted a plan of such a vessel last year to the Department. It was referred to the board of officers engaged in designing ships for the Navy, who exhibited indifference to the subject.

Much allowance should be made for persons grappling with the difficult problem of how to get but a speed of 15 knots, which seems to have been considered the maximum of United States ships of war, and who with ideas restricted to the contemplation of such slow vessels did not realize the possibility of a speed of 22 knots in a gunboat of 1,600 tons displacement.

It will not do for the United States Government to ignore such an invention as that of Mr. Herreshoff, especially at a time when the navies of the world are aiming at a speed of 20 knots an hour, which is only obtained with Scotch boilers and engines for a few hours by vessels of large size.

The adaptation of a power 50 per cent. less in weight than the Scotch boiler will enable us to use vessels of 3,000 tons as our fastest cruisers; for, if Mr. Herreshoff can obtain 27 miles an hour in a vessel of only 28 tons, there is no reason why a vessel of 3,000 tons could not be made to perform just as well. As regards the speed of our vessels, we have made no advance since 1861, when the *Seminole* and *Iroquois* could make at sea, in chase of a vessel, 13 knots an hour, while it is not certain that any of the ships now under construction will make over 12; in other words, they will be almost useless for naval purposes.

It is purposed to construct a 13-knot gunboat to carry four guns. Such a vessel could be of no use to the navy, except in time of peace to carry our flag among the islands in the Pacific Ocean, since she could not overtake anything, would be unable to keep the sea, and would be inferior to any enemy she would be likely to meet.

If this gunboat is intended for Chinese waters, she would be almost useless there except in time of peace. In case of any difficulty in that quarter, a powerful Chinese gunboat would be more than a match for her.

No gunboat should be built of less than 1,600 tons, and she should carry seven or eight guns, of which at least one should be of the heaviest type. She should have great speed to compensate for her inferior size, and the manner of obtaining that speed has already been pointed out.

It cannot be doubted that we have made some serious mistakes since we commenced to rehabilitate the Navy, and in my opinion we should take a new departure.

(1) We should consider the probable future requirements of the service.

(2) The class of vessels necessary to fulfill these requirements.

(3) Ascertain as near as possible the method of fighting by single vessels and in fleets, in order to devise a system of classification which will enable us to use our ships in future combats in the most effective manner.

If Great Britain and France were to go to war, they would find it a difficult matter to make an effective formation of lines of battle owing to the fact that they have not adhered to the old idea of constructing their vessels that are to go into line with due regard to that effective support which every vessel of war should expect from her consorts in fleet formation.

For many years Great Britain and France went on building iron clads and cruisers without regard to future uniformity, and those vessels, built at an early date, although apparently fitted with powerful batteries, would be so inferior to day as line-of-battle ships that in case of war they would probably not be employed.

We should endeavor to avoid the mistakes which have been made abroad. We have the examples before our eyes, and should not fail to profit by the labors of the most skillful naval architects in the world.

I do not hesitate to say that we are making a mistake by building so many different classes of vessels at the outset, without knowing whether any of them will meet the requirements of a cruiser of the present day. Four of our vessels, at least so far as I can judge from late articles published in a leading newspaper, are severely criticised by a large number of naval officers. Whether these reflections are all merited or not I am not prepared to say, beyond the general expression that a vessel which cannot make 16 knots an hour is unfit for cruising and in time of war would be laid up.

In the great interest in naval affairs now manifested by the country, the general idea seems to be that we should build a number of cruisers at once, without apparently reflecting that we need a class of vessels to protect our coasts and harbors. A man puts locks upon the doors of his house and buys a revolver to protect his property, but the United States Government takes no steps of any consequence to guard our seaboard cities with their hundreds of millions worth of property at the mercy of any foe who chooses to invade our coasts with heavy iron clads.

For every cruiser that we build we should construct a double-turreted monitor of the Monadnock, Miantonomoh, or Puritan type, only they should be built strong enough to resist modern ordnance, for these are the protectors upon which we must rely in time of war.

In former days, when wooden hulls were our floating batteries, our vessels would seek the protection of forts when hard pushed; but times have changed; our forts will need all the assistance they can obtain from iron floating batteries to enable them to hold their own against foreign ships of war. By the aid of properly-constructed iron-clads our forts could maintain themselves, but without them, as experience has shown, the massive masonry once considered impervious to shot would crumble before the blows of the newly-invented ordnance, and the apparently impregnable earthworks would be battered down without ceremony.

A fleet of the modern type will always have the advantage over a fort. After battering one portion of the works, a fleet can change its position or retire temporarily from action to repair damages, renewing the attack when it is thought proper to do so. This, however, could not be done if the fort is backed by a fleet of iron-clads running about and attacking the enemy at all points.

No nation can dispense with forts, but it is better to depend upon a navy to protect our coasts, instead of maintaining so small a force of iron-clads as we have at present. Every year we should construct three or four double-turreted monitors, no matter if we do not build any cruisers in the mean time.

Great Britain, with not one-fifth the extent of coast to protect that we have, has ever depended on her navy rather than on forts, and feels as secure to-day as when the Spanish armada was knocked to pieces by a squadron of inferior force.

Take it as you will, though forts are indispensable, nations with a long line of coast and many harbors, like ourselves, must depend upon

a navy to protect its shores and guard its cities against the contributions that would be levied upon them by a victorious enemy.

We do not require the massive iron-clads such as are constructed for European navies. We want nothing better than the double-turreted monitors, such as we already possess, with greater thickness of iron, and with the heaviest rifle guns that can be mounted upon them. Two of these monitors, fitted with rams and torpedoes and properly handled, would be a match for the heaviest European iron-clad that could reach our shores.

At the last session of Congress \$100,000 was appropriated to build a torpedo-boat. A single torpedo-boat would be useless except as an experiment. Since 1860 the world has been continually experimenting in regard to the torpedo, and from the experiments something must have been evolved that can be exploded under a vessel's bottom so as to sink or disable her.

I have seen enough of torpedoes to know that two or three hundred pounds of gun-cotton exploded under a ship, no matter what her size, is bound to sink her or place her *hors de combat*.

What we want are swift vessels from which torpedoes can be fired. It is difficult just now to decide upon the merits of the different forms of torpedoes. The Fish torpedo is evidently the favorite, although no device of this kind has made more failures than the Whitehead.

Yankee ingenuity, if stimulated by the prospect of a sufficient reward, would no doubt soon give us a superior torpedo. Mr. Ericsson has invented a torpedo which, if properly fostered by the Government, I think could be brought to perfection.

Much time and expense is required in the invention of torpedoes, and private individuals cannot be expected to undertake the task of perfecting these devices without Government aid.

Our country has done little to encourage inventors in this line, and no one in the Navy has yet devised a torpedo deserving of consideration. Even the Torpedo Station has not developed a desirable device, and there is little doubt that this great factor in war must be perfected by some one outside the Navy who can find time and money to devote to such an enterprise.

I am satisfied that for short ranges the Ericsson torpedo is the best in the world, but it is susceptible of improvement.

What we require to fire such a torpedo from is the fastest vessel in the world—something that torpedo-destroyers cannot overtake. For this purpose should be built a steel vessel on the Ericsson plan, 150 feet long, with a quadruple expansion engine. This vessel could attain a speed of 30 miles an hour, and would be the perfection of a torpedo-boat. It would only be necessary to devise means to protect her boilers and crew against the shot from machine guns. The great velocity of the vessel would insure her safety except from a chance shot from the heavy guns of the enemy.

It can be imagined what a terrible effect five or six torpedo-boats like the above mentioned, issuing from port under cover of darkness, would have on the blockading force of an enemy.

Even iron-clads, if aware of the proximity of such formidable antagonists, would be very cautious in approaching our coast after sunset. No enemy's vessel would dare anchor at night in one of our outlying bays.

It must not be imagined, however, that torpedo-boats will do away with the necessity for heavy ships and heavy guns; for, after all, torpedoes are but adjuncts in war, although powerful ones. Ships and

guns will be likely to win in the end, and means with which we are at present unacquainted will eventually be found to evade the attacks of torpedo vessels.

To complete the organization of a navy every factor going to make up the whole should be carefully studied and introduced.

There will be no difficulty in finding officers and men in the Navy to run all the risk required to be incurred in torpedo vessels. Blowing up a ship is a hazardous enterprise, but our civil war furnished an illustrious example of the readiness with which this can be accomplished by a determined will and a clear intellect.

I would recommend that twenty torpedo vessels, not less than 150 feet in length and having a speed of 30 miles an hour, be constructed as soon as possible. It is a cheap mode of alarming an enemy, and the moral effect cannot be overestimated. These vessels, of course, should be designed by the Messrs. Herreshoff who, with their quadruple expansion engines, would have no difficulty in obtaining the necessary speed.

Mr. Herreshoff claims that the same kind of engines and boilers used in his small vessels can be successfully employed in the largest cruisers required by our Government.

I do not think any British constructor of the present day would undertake to build one of these ocean greyhounds and use the compound engine, for it has been demonstrated that unless the ship is nearly filled with engines and boilers (in which case she would be suited only for carrying passengers) she could not attain the desired speed.

The present sea engine will soon be superseded by the triple and probably the quadruple expansion engines which are now being introduced into the fast passenger ships built in Europe.

I am informed that the present naval engine and naval boilers are to be used in the vessels now being planned for our navy, and I venture to predict if such is the case that we will attain very little better speed than in the vessels of the Atlanta class. The so-called "improvements" we introduce into the engines of our naval vessels are generally ideas that have been discarded elsewhere. This was notably the case in the building of the Chicago, Boston, and Atlanta. An able article published some years ago in a British periodical exposed the fallacy of the "improvements" in these vessels, and predicted their failure should they be built according to the plans.

When we see the great advancement in the steam engineering of British merchant vessels and note how rapidly obsolete machines disappear from sight, we cannot anticipate anything but failure when ideas that have been discarded by naval architects in Europe—ever alive to the improvement of the speed of vessels—are adopted in our ships of war.

It is necessary for us to be ever on the alert to keep pace with the improvements in Europe, and we should take advantage of the costly experience of other nations which reach us without expense, for although our people have in former years exhibited great ingenuity in designing vessels, yet at present we must go to England and France to obtain many improvements in the rapid propulsion of the larger vessels hereafter to be classed as commerce-destroyers.

I witnessed in Newport during the past summer the successful working of the Naval War College; and although unable to attend the lectures, I was satisfied from the daily reports I received that the college this year was even superior to the last, although that season was a very

creditable one. I believe the college will increase in favor with officers of the Navy, and those who have benefited by its course will always congratulate themselves that they had the opportunity to attend the institution. It will require but a small sum to maintain the college, and I trust that when its advantages to the Navy are considered Congress will not refuse the necessary annual appropriation.

It is an advantage to any officer to attend the War College or serve at the Torpedo Station, for the more professional knowledge he acquires at these institutions the more desirable it will be for a commanding officer to have him under his orders. Not only that; attendance at these institutions shows a proper *esprit de corps* and an appreciation of the efforts of the instructors who labor so hard to convey information which could probably not be obtained elsewhere without much more trouble to the student.

The War College has had a struggle for existence, owing to the prejudices existing against it in the Navy, although none of those who have antagonized the institution can give a single good reason why it should not be fostered, while many good reasons can be given why it should. This antagonism has tended to discourage the officers who have given much time and thought to the establishment of the college. These officers are well known for their ability and devotion to the service.

It is eminently proper that the Navy should have a higher school of education than the Academy at Annapolis, where, after all, the cadets only acquire the elements of their profession, and it is very desirable that the graduates should embrace every opportunity to see these principles practically applied or made plain to the understanding by a course of able lectures, which have become so popular in Newport that visitors consider it a great privilege to be permitted to attend them.

Greater facilities than it now possesses should be allowed the War College. A gunboat should be stationed there to enable the officers to obtain practical instruction in the heaviest class of ordnance, and also to conduct some practical experiments in torpedoes, for which facilities are not afforded at the Torpedo Station.

The torpedo-boat Alarm, now lying useless at New York, and rapidly deteriorating, would be an excellent vessel for the purpose indicated. She can mount an eight or ten inch rifle gun forward, and can be so arranged as to carry in addition four rifle guns of different calibers and the various machine guns used in the United States service.

There is no way by which officers of the Navy can make themselves familiar with the use of heavy rifle guns except by adopting some such course as I have indicated. Our old wooden ships carry a few obsolete rifle guns, some of cast iron, others converted eleven-inch. The only place where the new guns can be seen is on the lathe at Washington navy-yard or at the testing ground at Annapolis, in which direction comparatively few officers have occasion to go.

A year or two from now, when the Chicago, Boston, and Atlanta are fitted for sea, a few officers may be fortunate enough to obtain the desired information, but as a rule naval officers know nothing of the new rifle-gun except from reading, and the addition of a rifle-battery in the Alarm to the War College would increase the desire of the younger men to attend the institution, if only to receive that instruction in gunnery which they can now only obtain in some such manner.

This addition of something in the way of out-door exercises would add greatly to the prestige of the War College, for while all who attend the lectures must admit their benefit, some of the more energetic might

in the absence of practical exercises consider the course of instruction somewhat prosy.

The Alarm could be kept at the college with little expense beyond the alterations needed to fit her as an experimental vessel. She has lasted sixty years with no further repairs except occasionally a little patching and will endure longer from being kept in commission. She will require very few men, and there are so many officers out of employment that many would consider it a boon to be ordered to her.

The Alarm, armed as I propose, will be better adapted to coast defence than all the vessels in the home squadron put together—which is perhaps saying much—for on a recent occasion when it was desired to send a vessel to Aspinwall the small steamer Yantic was the only one in a proper state of repair to leave the navy-yard, the others being in the hands of constructors or machinists.

And here permit me to remark that this incident is a proof of the necessity for Congress appropriating a large amount of money for the increase of the Navy.

The new Navy amounts to some fourteen vessels, on paper; but not one of them, with the exception of the Dolphin, will be likely to turn a propeller or fire a shot for some time to come.

I hope I may be excused for inviting your particular attention to the matter of the War College, and trust you will urge upon Congress the necessity for making appropriations for advancing the great object it has in view, viz, the higher education of officers of the Navy, such as will enable them to better perform all the varied duties incident to that profession, and cause them to feel that the Government is anxious to encourage everything that will add to their efficiency.

I have heard complaints that no allowance of any consequence has been made this year for practical exercises at the Torpedo Station. This ought not to be the case, for the Torpedo Station is the only place where officers of the Navy have the opportunity to become thoroughly acquainted with the management of the torpedo, which is yearly becoming a more important feature in warfare. Officers should be afforded every opportunity to put in practice at the station what is now being done abroad in the torpedo line.

A decrepit launch, carrying a bag of powder at the end of a pole, has of late been the only practical method of instructing young officers of the Navy in torpedo matters; and the theoretical exercises, although excellent in their way, do not compensate for the want of practical instruction.

The Torpedo Station should receive fostering care from the Department.

I beg leave to draw your attention to a fact not creditable to the Navy, as it shows that in one respect we do not keep pace with the mercantile marine.

The Board of Inspection and Survey has never yet found in any of our vessels an efficient life-boat, one that can be safely lowered in rough weather, nor can they report the existence of any reliable boat-lowering or boat-detaching apparatus in use on board our vessels of war. We have whale-boats fitted with detaching apparatus, which, however, cannot be classed as "life-boats," for they would capsize or swamp if let go from the davits while a ship was under headway. There are many good life-boats in use on board passenger steamers, boats that cannot be upset in launching, no matter how fast a ship is going through the water.

It shows a want of consideration for the lives of our seamen, who frequently fall overboard, not to have all proper rescuing appliances. Our boat-detaching apparatus is particularly bad. Some of this is the invention of officers who receive a royalty from Government for useless contrivances. One that I recall is not by any means an original idea.

I recommend that a board of officers be appointed to select a good boat for the naval service, to be fitted with the best detaching apparatus now in use.

I would also suggest that a board be convened to take into consideration the allowances of ships of war. There is at present an unnecessary amount of weighty material on board our ships which can be dispensed with. The number of anchors, chains, hawsers, blocks, spars, and other articles too numerous to mention, which were necessary in the days of purely sailing vessels, are so no longer.

Even the quantity of provisions and ship's stores of all kinds can be reduced, and the space thus gained can be devoted to fuel and ordnance stores.

It must be remembered that fuel in time of war becomes contraband by agreement of the European powers, and we are crippling our proposed cruisers by so great a reduction in sail power that it behooves us to find as much room as possible for coal.

In relation to this matter of sail power I have recently noticed discussions in the newspapers in which it was stated that one reason for curtailing masts and rigging on ships of war as much as possible was on account of the danger in action of the rigging being cut away and fouling the screw.

This proposition evidently did not emanate from a seaman, for it is a rule in the Navy before going into battle to strip the ship for action, and every piece of rigging that could by any accident fall overboard is tallied and stowed between decks.

Not only that; a well-drilled ship, with royal yards across and sails bent, will require but twenty-five minutes to strip to a girtline, with topmasts housed, lower yards on the gunwale or a-cockbill, and all standing rigging securely lashed, so that it could not possibly get adrift if cut by a shot.

A ship may sail her whole lifetime and never be fired at, and can use her sails to go all over the world without touching her coal.

No navy can afford to be as extravagant as we are in the use of coal. From the amount of fuel burned by our ships one would suppose we owned coal mines all over the world, yet those who advocate the reduction of sail-power in our cruisers do not seem to consider that in time of war our commerce-destroyers would have to find their way home under their hybrid rigs without coal for their furnaces, while a few of the enemy's gunboats, armed with long-range guns, could hang on their flanks and do them considerable damage.

Therefore, in my opinion, the Trenton, with her present rig and steam-power, would be a better cruiser in time of war than any of the vessels lately built, and if armed with the heavy guns which she could very well carry, would be more than a match for them. Great Britain can perhaps afford to have cruisers with nothing above their trysails, for the sun never sets on her coal stations.

Twenty-three years ago this subject of commerce-destroyers was better understood than it is to-day. The Alabama, the most noted vessel of this class, was built with equal sail and steam power, so that she could cruise under sail, with a favorable wind, as fast as she could under steam when the breeze failed her.

It was under sail that the *Alabama* captured most of her prizes. She left the Azores, destroyed the whaling fleet in the North Atlantic, cruised through the West Indies, thence to the coast of Brazil, around the Cape of Good Hope, through the China seas, and back again to the coast of France, and most of this without using her steam.

The plan pursued by the captain of the *Alabama* made necessary an entire change in the class of vessels to be used as cruisers and commerce destroyers, and such strenuous efforts are now put forth by the naval powers of Europe in this direction that there is little difference between them as regards the speed of their fast steamers: but, though they do not carry quite the same amount of sail-power that ships of similar size would have done in the olden time, yet they have sufficient canvas to go where they desire, which would make them doubly useful in time of war.

The rigs proposed for our new gunboats are better than those for the ships, although that of Gunboat No. 1 will be found of little use to be for cruising under sail. The *Huron* and *Ranger* were of this rig, although, I think, better proportioned, yet the rigs of both those vessels was found unsuitable for the purpose intended.

It is supposed that the loss of the *Huron* was owing to her rig. As she was running along the coast and sounding, the sail area was too small to add to her headway, and when the engine was stopped to take soundings the effect of the sail was to drive the vessel on a lee shore.

This rig was abolished in the Navy, and the *Ranger* was converted into a bark, the same as the *Alert*.

If the new vessels of that class were rigged as three-masted schooners, with full sail power, it would prove an excellent arrangement.

The apportionment of sail power for naval vessels requires much consideration. It is better to have too great an area of canvas rather than too little, for the latter defect cannot be remedied.

I beg leave to refer to a subject in which I believe you are warmly interested, and to which you have given considerable attention—that is, the reorganization of the different branches of the Navy, and especially the Navy Department.

I think the opinion is general throughout the service that until the Department is reorganized we can have no system, maintain no proper discipline, and build no effective ships, but that a reorganization of the Department will bring order out of chaos and the Navy will run along as smoothly as it did previous to 1842, when the Board of Navy Commissioners were the advisers of the Secretary of the Navy and had administrative and executive authority.

This reorganization must take place sooner or later, and whoever achieves so great a victory will deserve the thanks of the country.

I have seen the workings of both systems—the old and the present—and, with no prejudices whatever in the matter, I have for the past twenty-five years strenuously advocated a change for reasons which, as they appear in most of my previous annual reports to the Department, it is unnecessary to repeat.

I think we should adopt a system in the Department somewhat similar to the British board of admiralty, the Secretary of the Navy to be the political, judicial, and financial head of the Navy, holding somewhat the relation to a board of control that the first lord of the admiralty does to the board of admiralty.

The Bureau system, under proper restrictions, has many good points, but it is insufficient in its present condition to build up an effective navy or carry on war.

There should be a change in the number of Bureaus. That of Provisions and Clothing should be merged into a Bureau of Accounts and Purchases, to purchase everything required for the Navy and settle all accounts of the various Bureaus and departments of the service, placing them in final shape for presentation to the Fourth Auditor. The name of the proposed Bureau will indicate its duties.

There should be a single Bureau of Construction, Steam Engineering, and Repair, under one head. This would prevent the caviling which has heretofore existed in regard to the placing of engines, masts, &c., and would make one person responsible for any mistakes committed in the construction and repair of ships and machinery.

This simple change in the Bureau system could be easily brought about without friction, and the necessary changes made in the detail of the Bureaus would naturally be indicated by the nature of the work to be accomplished.

The Board of Control, or Commissioners, or whatever name may be given it, should consist of three line officers not below the grade of captain, and one line officer, of the grade of captain, to act as secretary of the Board. The naval head of the Board should be senior in rank to every officer in the Bureaus, and the Secretary of the Navy should be *ex officio* president of the Board during its sessions.

This Board should be advisory to the Secretary of the Navy, and, under his immediate direction, should be intrusted with the maintenance of naval discipline, and should hold such supervision over the work going on in the Bureaus as the head of the Department may direct.

All plans of navy-yards, buildings, ships, engines, boilers, guns—in short, everything relating to war—should be submitted and approved by the Board before being carried out. In fact, under the direction of the Secretary of the Navy, the Board should have the general management of the naval service.

It can be readily seen that a Board of this kind, having the confidence of the Secretary of the Navy and working in harmony with him, would have the best of influences on the service. It would be simply the revival of the Board of Navy Commissioners with advisory powers, to exercise supervision over the general administration, the whole under control of the Secretary of the Navy, who could tell at any moment the exact condition of affairs, and would not have to convene a special advisory board every time a ship was to be constructed.

Plans somewhat similar to this have been submitted to several of your predecessors, who, although approving the idea, seemed to think it would deprive them of a portion of their authority. On the contrary, it would make the head of the Department stronger than ever before. Instead of groping in the dark for information when first inducted into office, the Secretary would have at hand his official family, whose business it would be to furnish him with an account of the actual condition of the Navy, and upon whom he could rely for advice to prevent him from committing mistakes. The commanding officer of a ship is never so strong as when he has about him reliable subordinates to whom he can safely depute his authority and feel certain that his orders will be faithfully carried out.

I herewith annex a list of vessels that have been inspected going to and returning from sea, &c.:

Vessels in commission inspected for general efficiency.

Name.	Date of inspection.	Remarks.
Brooklyn	November 18, 19, 20, 1885..	At Maro Island. Do.
Vandalia	March 30, 31, April 1, 1886.	
Tallapoosa.....	April 7, 8, 1886	
Juniata.....	July 14, 15, 1886.....	
Alliance	July 6, 7, 1886.....	
Essex.....	August 11, 12, 1886	
Michigan	September 25, 1886	
Alert .....	.....
Shenandoah .....	.....

Receiving-ships.

Franklin.....	July 6, 1886	Examined as to fitness for a receiving-ship found in good condition, and so recommended
Vermont.....	July 13, 1886	
Wabash	August 27, 1886	
Constitution.....	August 28, 1886	

Vessels examined under section 2, act of August 5, 1882, reported unfit for further service, and recommended to be sold.

Name.	Date of inspection.	Amount.
Powhatan	July 13, 1886.....	\$30,000

Vessels examined under section 2, act of August 5, 1882, and recommended for repairs.

Name.	Date of inspection.
Juniata	December 16, 17, 1885.
Enterprise	March 17, 1886.
Nipsic	May 26, 27, 1886.
Trenton.....	September 6, 7, 1886.

The vessels in commission were found to be in excellent order, and their discipline highly creditable to their officers and men.

The receiving-ships have all been inspected and found to be in good condition, well ventilated, and suitable for the reception of recruits.

As far back as 1862 Mr. Secretary Welles, in his annual report, strongly recommended the establishment of an iron-ship building yard in the waters of the Delaware. At that time we possessed only a small navy-yard at Philadelphia, not at all suited for such purposes.

The necessity for a Government iron-ship building yard is greater to-day than it was in 1862, as we have at last commenced to build an iron navy, while it seems that neither Government nor private individuals possess the necessary facilities for the rapid construction of ships of war.

I am in favor of the Government encouraging the private ship-yards of the country by giving them all the work possible to enable them to improve their plant, so that in time of war they can aid the Government in building and repairing vessels. At the same time the Government should be independent of outside persons, so that in case contractors

decline to do the public work at proper prices we may construct our own ships.

The possession of League Island gives the Government all facilities for establishing such a yard near a large city, where coal, iron, and wood can be procured cheaper than at any other place—a city that contains a greater number of skilled mechanics than any other in the Union.

I beg leave in this connection to invite your attention to the reports of the Secretary of the Navy and of the Chief of the Bureau of Yards and Docks for 1862 and 1863. Had the advice therein given been heeded by Congress, we would have had at this day one of the best building yards in the country, and would have been wholly independent of outside persons.

As it is, we have but one navy-yard where we can build an iron ship. Some spasmodic efforts have been made to transform League Island into a building yard, but these attempts have been on such a small scale as to be barren of results. At this time the island looks as if appealing to the General Government to redeem its promises to the State of Pennsylvania and establish in the Delaware a *bona-fide* building yard that would inure to the benefit of the country.

I have the honor to be, very respectfully, your obedient servant,
DAVID D. PORTER,

Hon. WILLIAM C. WHITNEY,
Secretary of the Navy.

Admiral.

REPORT OF THE BOARD OF VISITORS TO THE UNITED STATES NAVAL ACADEMY.

UNITED STATES NAVAL ACADEMY,
Annapolis, Md., June 11, 1886.

SIR: The Board of Visitors to the United States Naval Academy have the honor to submit the following report:

The Board consisted of the following gentlemen: Commodore Bancroft Gherardi, U. S. N.; Hon. J. D. Cameron, U. S. Senate; Hon. J. C. S. Blackburn, U. S. Senate; Hon. A. C. Harmer, House of Representatives; Hon. T. M. Norwood, House of Representatives; Hon. C. B. Lore, House of Representatives; Hon. John Bigelow, Gramercy Park, N. Y.; Hon. J. D. Bedle, Jersey City, N. J.; Hon. D. M. Dickinson, Detroit, Mich.; Capt. F. W. Dawson, Charleston, S. C.; Prof. A. D. Wharton, Nashville, Tenn., and J. C. Richardson, esq., Greenville, Ala.

The Board was organized on June 5, as follows:

President.—Commodore Bancroft Gherardi.

Vice-president.—Hon. John Bigelow.

STANDING COMMITTEES.

1. *Conditions of admission to and discharge from the Academy.*—Hon. J. D. Bedle, Senator J. D. Cameron, Hon. A. C. Harmer, Commodore Bancroft Gherardi, Hon. John Bigelow.

2. *Subjects of study and standard of scholarship.*—Prof. A. D. Wharton, Capt. F. W. Dawson, Senator J. C. S. Blackburn, J. C. Richardson, esq.

3. *Grounds, buildings, and sanitary condition.*—Hon. John Bigelow, Hon. T. M. Norwood, Hon. J. D. Bedle, Hon. C. B. Lore, Hon. D. M. Dickinson.

4. *Seamanship, ordnance, and navigation.*—Commodore Bancroft Gherardi, Prof. A. D. Wharton, Hon. A. C. Harmer.

5. *Discipline, drill, practical exercises, administration, and police.*—Hon. D. M. Dickinson, Capt. F. W. Dawson, Comodore Bancroft Gerardi.

6. *Steam, mathematics, physics, and mechanics.*—Capt. F. W. Dawson, Senator J. C. S. Blackburn, Hon. John Bigelow.

7. *English studies, modern languages, and drawing.*—Senator J. C. S. Blackburn, Hon. J. D. Bedle, J. C. Richardson, esq.

8. *Finance and library.*—Hon. T. M. Norwood, Hon. C. B. Lore, Hon. D. M. Dickinson.

9. *Final report and selection of orator to address the cadets, June 11.*—Senator J. D. Cameron, Hon. C. B. Lore, Hon. T. M. Norwood, Prof. A. D. Wharton, J. C. Richardson, esq.

The recommendations of these committees are incorporated under corresponding heads of this report.

I.—CONDITIONS OF ADMISSION TO AND DISCHARGE FROM THE ACADEMY.

The Board are decidedly of the opinion that appointments to the Naval Academy should not be made, as is usual, only a very few weeks before the academic year is to commence, and oftentimes afterwards, but that they should be made one year, or nine months, at least, in advance of that time, thus allowing opportunity, if required, to pursue a special course of preparatory study, and enable the candidates to present themselves in better condition to enter at once upon their professional course.

They are also of opinion that an alternate should be named at the same time with the first selected candidate, who shall stand ready to take his place should he be rejected for any cause.

The Board further recommend that all the cadets pursue for the first three years of their course the same line of studies, and at the end of this time they be allowed to choose which of the three branches of the service they prefer to adopt, subject to the approval of the Academic Board, and that they shall be so assigned, and their course subsequent to this shall be so shaped as to meet this view.

The Board are also strongly of the opinion that those cadets who are not to be taken permanently into the Navy should be discharged from it at the end of four years, instead of at the end of six years, as at present.

As the rule now stands, the cadets, after their four years' course at the Academy, are sent, usually at great expense, to join ships on foreign stations, and again are sent home therefrom after broken cruises, too short to make them efficient officers of the ships aboard which they serve.

From another point of view this change would be beneficial to the young men themselves, who have then reached the ages when, if they are not to remain in the Navy, they should seek for those business connections which may bring them a livelihood, and which are more difficult to make if longer delayed.

The Board therefore recommend that the cadets be discharged, as above stated, and that they then receive a suitable allowance.

The Board recommend appropriate legislation to give these proposed changes effect.

II.—SUBJECTS OF STUDY AND STANDARD OF SCHOLARSHIP.

A careful examination of the curriculum of studies at the Academy for the past ten years shows a course most excellently adapted to achieve its purposes. Wisely enough it is general and fundamental for the first

three years, but this part is accompanied by such a thorough and systematic course of practical professional exercises, which also continue the fourth year, that the cadet is trained almost as if his studies were purely technical.

The Board would highly commend the harmonious blending of the general and special education, the theoretical and practical, during the first three years at the Naval Academy. If, at the end of this period, a cadet be allowed to elect the branch of service he would enter upon after graduation, subject to the approval of the Academic Board, such good results would follow that your Board have no hesitation in recommending it.

The examination for admission is not too difficult for the youngest of candidates, for the records of the past sixteen years show that 62½ per cent. of all those between fourteen and fifteen years of age were successful in passing it, as against 58 per cent. of the successful ones between the ages of seventeen and eighteen.

The course of study is not too difficult, for the records of the past twelve years show that out of 855 candidates who were admitted, 467 graduated, nearly 55 per cent. In connection with this statement it might be added that 66 per cent. of candidates who were admitted between the ages of fourteen and fifteen graduated at the close of the four years' course, as against 64 per cent. of those admitted between seventeen and eighteen years of age.

The preceding facts would seem to show that it is best for cadets to enter the Academy at the youngest limit of age.

The inclosed table of statistics for the past ten years' marked A, shows that the scholarship of the Academy is improving in a very gratifying degree.

The Board, in no fulsome spirit of flattery, nor stereotyped form of praise, would cordially commend to your approval the present excellent selection and arrangement of studies at the Naval Academy.

III.—GROUNDS, BUILDINGS, AND SANITARY CONDITIONS.

Buildings.—New quarters for the cadets are required, and in part at least absolutely necessary.

Buildings three, four, and five, in the old quarters, are occupied by cadets, for want of room elsewhere. These are in Stribling Row, in which buildings eight and nine—abandoned as quarters for cadets and occupied by officers—are in such a condition of irreparable decay that they are liable to fall down at any time.

Three, four, and five, and recitation hall are unfit for occupation and have been for years, as reported by previous visiting boards. The discontinuance of the use of these buildings is vigorously urged before the wisdom of the recommendations of our predecessors and ourselves shall be demonstrated by some serious calamity.

These buildings were erected in 1851; the new quarters, so called to distinguish them from the old quarters just referred to, were built in 1866. They are badly ventilated, from the faults of ancient construction; the kitchen is situated in the basement, and the mess-room is in the same building. Their situation is comparatively bad, the site of Stribling Row, a quarter of a mile away, being the best situation in the grounds for the purpose.

We recommend the following new buildings in the order of comparative necessity:

First. New quarters.

Second. A new mess-hall.

Third. A new recitation hall.

The need of new quarters is imperative, and we think that a building to cost about \$60,000, according to the estimates, should be forthwith commenced.

It is suggested that the present mess-room might be used, temporarily, as a recitation hall, but the use of the building in which the students live for cooking or mess-room purposes should be discontinued as early as practicable.

Grounds.—The grounds are beautifully kept, and of course are essential for the uses of the Academy.

It is recommended that the grounds be enlarged by the purchase of a new site for the gas-works. There is no better place in the present grounds for the purpose than that now occupied for the manufacture of gas, but the offensive conditions incident to the works can now be removed by a very small expenditure of money in the purchase of a piece of land adjacent to the grounds.

Sanitary condition.—It seems to the Board, after a careful examination of the statistics of sickness in the Academy, that the defects in construction, and the decay of buildings already adverted to, testify to their correctness.

Great attention is given by the officers to the sanitary condition, and everything possible is done in this direction. It cannot approach what it ought to and may be until the relative situation and internal arrangement of all the buildings shall be in accordance with modern methods and improvements.

IV.—SEAMANSHIP, ORDNANCE, AND NAVIGATION.

The exercises in steam-fleet manœuvres and seamanship showed a degree of efficiency which is extremely creditable to the cadets under instruction. It is evident that instructors have been very zealous in the execution of their duties.

The fleet maneuvers were performed by a fleet of eight steam-launches.

The drill in seamanship was carried out on board the Wyoming, and consisted in making and shortening sail under the various conditions of weather that might be met at sea.

After the drill in seamanship, the ship was cleared for action, and then the cadets went to general quarters, and the guns' crews were exercised at target practice.

There was a general expression of approbation as to the accuracy, as well as rapidity of fire, and there were several persons present who, from past experience in active service, were certainly most capable judges. The distance of the target was 1,000 yards.

The course of instruction in ordnance is very thorough, and up to the requirements of the present day.

The Board observed with satisfaction that in all the exercises of making and shortening sail, target practice, &c., on board the Wyoming, the cadets themselves performed all the duties of both officers and crew.

The department of seamanship should certainly be supplied with working models showing the construction of the different types of iron vessels.

In the instruction of cadets in navigation, the course seems so complete in every respect, that your Board in referring to it has only words of approval and commendation.

V.—DISCIPLINE, DRILL, PRACTICAL EXERCISES, ADMINISTRATION, AND POLICE.

Discipline and administration.—The subject of discipline has received from the Board more attention than any other they have had under consideration, and they have given the subject thorough investigation.

In respect of the practical administration of the law and rules now governing the Academy, and of the exercise of the powers at present reposed in the Academic Board, we not only find no fault, but can put down no word save of commendation.

If there be failures in satisfactory results to young men, after they have pursued the course of study, moral training, and discipline of this school, we are of opinion that such failures may be traced directly to difficulties in the fundamental law, or to a want of needed jurisdiction and power in the board of officers placed here to govern it. It seems to us the simple proposition that the trained and tried gentlemen in charge must, in the very nature of things, be most capable of passing upon and of finally deciding every direct or collateral question affecting the all-important subject of discipline in the Academy.

It would seem that in respect of conduct, as well as of scholarship and of physical ability, the standard should be fixed, or, in their discretion, varied by the Board, and that their judgment as to construction and infractions of laws and rules by that standard, as well as on the merits of each specific case, should, as a universal rule, be final. It would seem to be necessary for effective and thorough discipline that it should be the settled and perfectly understood policy that the case must be rare indeed when the decisions of the general Board and of the Medical Examining Board can be appealed from with any hope of success.

We do not, of course, intend to be understood as meaning to recommend taking away the power of the Executive to revise and disapprove of a sentence of dismissal from the Academy, but we do recommend that the subject be placed on the footing of trials and decisions by courts-martial. We do recommend also that the action of the Medical Examining Board, at the initial examination and at subsequent examinations, should be final, or, at most, that the power to waive the defects found should not reside out of the Academic Board in any such case.

We append drafts of sections as suggestions for legislation on these subjects.

The system of rewards and penalties predicated upon the demerit or credit-mark system is a good one, and good effects have followed. While the general application of that system often works injustice to individuals, yet there has been no better one devised. That there are peculiar difficulties in the general working of the system at this Academy there can be no doubt, but it is equally true that these difficulties are chargeable rather to exceptional conditions affecting this especial institution than to the credit-mark or demerit plan itself. These conditions may be remedied partially, if not entirely, and that they should have the most careful consideration, and that a remedy should be perseveringly sought we are thoroughly convinced. The trouble is organic and its tendency evil. The added two of the six years' course has developed it into a positive menace to the mental and moral health of the cadet. It is this: The comparatively small number of the large classes who can, by any reasonable probability, expect to enter the service in the Line, the Engineer, or the Marine Corps are chosen from those in the graduated class standing highest in scholarship and conduct on their whole record in the Academy. In this state of things the boy

entering the institution comes with his chief hope and ambition laid upon entering the naval service. Thus, it may well be assumed, such an absorbing idea of his young mind, as he then contemplates his future life.

Under the credit-mark system the lad who falls behind can pretty well forecast as early as the end of the second or third year that he is predestined to leave the service in the ordinary course of things. He sees that he cannot regain his lost ground in the progressing class. The result must be harmful to the proper mental health and mental growth of the young man, whose mind has not yet considered, and may not for years be brought to realize, that life has anything of fortune or of heroism for him outside that service, entrance to which is thus cut off. He continues, however, after this conviction has been brought home to him through the third or fourth, fifth and sixth years of the course. The stimulus to advancement is thus taken away, and generally a large portion of each class enters upon the last two years with the certainty that they cannot enter the service. The result is that none of these do their best; many of them become more or less demoralized and the course becomes a positive injury to them. In such case their example must have a deleterious influence upon impressionable men with whom they are associated, and so the general effect upon the school becomes bad. The record of the two years' cruises and the medical records furnish abundant testimony to the correctness of these conclusions.

Officers who have had charge of cadets, especially on this last two years' cruise, graduates and cadets themselves, bear witness to the effects here pointed out, and it is said on such authority that many of these boys go through the latter part of the course, covering two or three of the best years of life, keeping barely within the pale of academic law with the poor purpose of securing the \$1,000 to come to such graduates from the Government.

It must appear to the ordinary observer of human nature that in these circumstances the tendency cannot be but demoralizing.

The boys on the two years' cruise occupy a nondescript position: in the Navy, but not of it. There is and can be no *esprit de corps*, and, worse still, there is loss of individual energy, ambition, and self respect which must prejudice the young man in his chances for advancement in another calling.

We have given the subject careful thought, and as a partial remedy have made a recommendation in another place as to shortening the term. As another remedy we recommend the opening up of other branches of service to the surplus cadets of the graduating class. The Revenue Marine Service of the Government should be officered by men educated and trained for the Government service, and we urge the manifest propriety of filling that service from this school. We have no other recommendation to make on this subject, but we suggest whether the peculiar circumstances thus affecting the cadets in this institution might not call for some slight changes in or modification of the rules of preferment predicated upon credit or demerit marks. In making it we wish to be understood as in no way asserting that we are prepared to criticize the system. While there would be something lost in theory by any change in the rule of promotion or advancement by merit, yet we think a greater good for a greater number would be gained in substantial benefit to the whole class of cadets, if the possibilities of future success, entering the service, were opened up to a larger number, and, if possible, to all men to whom this institution proposes to issue its diploma, which is a certificate of competency and fitness. We say open up the possibilities; while all the branches of the service, including

that of the Revenue Marine, may not furnish places for every graduate, yet the chances of employment might be enlarged by lot.

To illustrate by a recent year under the present system: There were no more than ten to be appointed in the line, and there were a few chances, not exceeding three, of appointment in the Engineer and Marine Corps. If the rule were so that instead of every man in the class from one to thirteen, counting from merit grade, could have had a certainty of place, those in the class from one to thirty could have had a chance for one of these thirteen places, it may be that the change would be beneficial. We do not say that it would be so, but suggest the matter for thought.

Certain it is that it would be better for the Government, better for this institution, and better for the boys, if the service might retain or have a chance for retaining some of the surplus boys of this graduating class.

The Government does not reject as incompetent and unfit boys below the grades now reserved for the service; on the contrary, it gives them a certificate of competency and fitness. In view of all experience and of notable instances, we cannot think that it would impair the efficiency of the service if the Government took some chances of getting as good, as able, as useful men, and possibly as great commanders, between classmen thirteen and thirty as between one and thirteen.

Drills.—We are quite sure that the entire Board of Visitors agree in their strong commendation of the careful training exhibited by the drills—infantry, artillery, ordnance, and seamanship.

It is regretted that the proficiency of the cadets in these branches cannot be more generally witnessed and appreciated.

Practical exercises.—The system of practical exercises, a thorough and extensive application of the principles of object teaching, is followed by the best results. The fixing of theories in the memory, in connection with the drilling of the mind to mental exercise, and teaching the student how to think from cause to effect, are benefits beyond mere learning of books, as we see here demonstrated.

VI.—STEAM, MATHEMATICS, PHYSICS, AND MECHANICS.

The Board are deeply impressed with the practical character and large extent of the instruction in these departments.

In steam engineering, for example, the course of regular work in the blacksmith and boiler shops covers forging iron and steel, chipping and filing metals, and the repairing of boilers. This is followed by pattern-making and training in the use of machine tools. The cadets are made familiar with the construction and management of boilers and engines, taking apart and putting together the large engines in the steam building. The work in this building is supplemented by instruction under steam in the engine rooms of the Standish, the Wyoming, and the Passaic, and in steam launches.

It is evident from the samples of cadet work examined by the Board that the cadets attain a skill in practical mechanics which is most gratifying. The engines of some of the launches in use at the Academy were adjusted, fitted, and assembled by the cadets, only the rough castings being supplied them for the purpose.

The equipment of the department, in the character of the machinery and implements, is equal to that of any machine-shop in the country, and if more time could be given there is no doubt that the training of the cadets would be absolutely complete. Under the existing law, however, there is no distinctive training for cadets who may enter the Engineer Corps. It is only at the end of the full term of six years that it

is determined whether a cadet shall remain in the line or become an engineer.

Perhaps more instruction in engineering, both practical and theoretical, is now given than is necessary for a line officer, and, on the other hand, the instruction is necessarily too meager to supply properly-instructed men to fill the Engineer Corps of the Navy.

Your Board, therefore, earnestly recommend that the cadets at the end of their third year be assigned to the line or the Engineer Corps by the Secretary of the Navy, upon the recommendation of the Academic Board, consideration being given, as now, to the preferences of the cadets. The effect of this will be to allow the cadets who are assigned to the Engineer Corps to give the whole of their fourth year to engineering studies, and in like manner when on their sea-service for two years, they can give their whole time to perfecting themselves in their profession. Commensurately, the cadets who are assigned to the line will have more time than is now available for the study and practice of seamanship, ordnance, and navigation. The advantages of the change proposed are, in the opinion of the Board, great and obvious.

• VII.—ENGLISH STUDIES, MODERN LANGUAGES, AND DRAWING.

The Board have carefully examined into the ways, methods, and system of instruction of "English studies, modern languages, and drawing," as given in this Academy, and after careful thought, investigation, and consultations we do not find that the ways, methods, and system in these matters can be improved upon, under existing circumstances, and we therefore do not recommend that any change be made therein.

VIII.—FINANCE AND LIBRARY.

The system of orders, requisitions, inspections, certificates, and vouchers adopted and enforced by the Superintendent in all expenditures of money for the Academy, insure strict economy, accuracy in the accounts, and facility and certainty in the detection of any error that may occur.

The books of accounts reflect this accuracy. They exhibit in a comprehensive and admirable manner the fiscal transactions of each year, entering into the minutest detail as to time, person, material, and amount in each department, and containing summaries and aggregates, so that the exact financial condition of the institution is constantly manifest.

A thorough inspection of the methods of purchases and expenditures has satisfied the Board that marked care, economy, and good judgment are exercised in the financial management of the establishment.

The library contains over 23,000 volumes. The scientific and technical departments are specially complete, while the miscellaneous collection is well assorted. The classification and arrangement of the book is complete, and the library is kept in excellent order.

Each year additions have been made to the library as valuable works have been published, and the selections have been made with special skill.

The yearly appropriation of \$2,000 for library purposes is, for the present, ample.

The library building needs an addition. An assistant librarian is needed, and the Board recommend an appropriation for that purpose.

In conclusion, the Board propose the following regulations regarding the course for naval cadets, and recommend that they be established by legislation:

Naval cadets shall be appointed one year in advance of the time of their admission to the Academy, except in cases where, by reason of death or other cause, a vacancy occurs which cannot be provided for by

such appointment in advance; but no pay or other allowance shall be given to any appointee until he shall have been regularly admitted, as herein provided, and all appointments shall be conditional until such provisions shall have been complied with. Each naval cadet shall, previous to his admission to the Naval Academy, take and subscribe an oath or affirmation in the following form:

I, A B, do solemnly swear that I will support the Constitution of the United States and bear true allegiance to the National Government; that I will maintain and defend the sovereignty of the United States paramount to any and all allegiance, sovereignty, or fealty I may owe to any State or country whatsoever, and that I will, at all times, obey the legal orders of my superior officers and the rules and articles governing the Navy of the United States.

Each naval cadet shall, at the time, and as a condition of admission, sign articles, with the consent of his parent or guardian, by which he shall engage to serve eight years unless sooner discharged.

Naval cadets shall be subject, at all times, to do duty in such places and on such service as the President may direct.

No candidate for admission to the Naval Academy rejected for physical disability by the medical examining board, and no naval cadet who is reported as physically incapable, and is recommended to be discharged from the Naval Academy therefor, shall, unless upon the recommendation of the Academic Board, be admitted, returned, or reappointed to such Academy.

No naval cadet who is found deficient in either conduct or studies, and is recommended to be discharged, and is legally discharged from the Naval Academy therefor, or who resigns his appointment when deficient in either conduct or studies, shall, unless upon recommendation of the Academic Board, be returned or reappointed to such Academy before his class shall have completed the course provided by law for naval cadets and received their commissions.

The Superintendent of the Naval Academy shall have power to convene general courts-martial for the trial of cadets, and to execute the sentences of such courts (except the sentence of dismissal), subject to the same limitations and conditions existing as to other general courts-martial.

The Superintendent of the Naval Academy shall have power to order courts of inquiry to investigate matters concerning naval cadets.

Very respectfully,

BANCROFT GHERARDI,
U. S. Navy.

JOHN BIGELOW.

T. M. NORWOOD,
Member Congress from Georgia.

CHAS. B. LORE,
House of Representatives.

J. D. BEDLE,
Jersey City.

DON N. DICKINSON,
Detroit, Mich.

F. W. DAWSON,
Charleston, S. C.

A. D. WHARTON,
Nashville, Tenn.

J. C. RICHARDSON,
Greenville, Ala.

To Hon. WILLIAM C. WHITNEY,
Secretary of the Navy.

We respectfully dissent from the conclusions reached as to the powers proposed to be conferred upon the Academic Board, and agree to all else in the report.

J. D. CAMERON,
United States Senator.
JO. C. S. BLACKBURN,
United States Senator.

REPORT OF THE CHIEF OF THE BUREAU OF YARDS AND DOCKS.

BUREAU OF YARDS AND DOCKS,
NAVY DEPARTMENT,
Washington, D. C., October 26, 1888.

SIR: The following report of the operations of this Bureau, and tabular statements of the expenditures for the fiscal year ending June 30, 1886, is hereby respectfully presented. Accompanying these are submitted to your consideration the estimates for the fiscal year ending June 30, 1888.

The gross amount of estimates for the different navy-yards and stations are shown to be as follows:

For improvements	\$5, 498, 930 15
For general maintenance	474, 905 05
For repairs and preservation	1, 240, 073 06
For Naval Asylum	87, 611 00
For civil establishment	78, 501 15
Grand total	7, 380, 020 99

Certain very necessary improvements are estimated for in addition to the regular amounts required under the general heads of "repairs and preservation" and "general maintenance."

The estimates of the Bureau are summarized as follows:

For support of Bureau of Yards and Docks	\$11, 980 00
For general maintenance and contingent	340, 000 00
For support of Naval Asylum	87, 611 00
For repairs and preservation	800, 000 00
For improvements at navy-yards	3, 308, 961 16
For civil establishment	63, 203 97
Total	4, 611, 756 13

The tabulated statements that follow this report show in detail the amount of expenditures and estimates for the several navy-yards and stations and the Naval Asylum, under the different heads of improvements, repairs, support of the Naval Asylum, civil establishment, general maintenance, and contingent.

As stated in my last yearly report the condition of the buildings, dry-docks, wharves, &c., in the different yards, owing to the want of sufficient appropriations for their repair, preservation, and maintenance, is that of decay and general deterioration, and unless a more liberal amount is awarded by Congress this year than has been given for the past few years, it becomes only a question of time when our yards will be unequal to the performance even of the ordinary current work of repairing and fitting out the few vessels we now have, not to speak of the utterly insufficient resources they will offer in the emergency and strain of war.

When one compares the condition of our naval stations in the large ports with private and corporation property in their proximity, it compels a sense of humiliation, both to the private citizen and naval officer, and seems to indicate a state of bankruptcy rather than the wealth and power of a great nation.

Your attention was called to this condition of affairs last year in the statement made by me in my annual report, which I now beg leave to repeat:

Scarcely a week has passed since I assumed control of this Bureau that reports have not been received of buildings tumbling down, or liable to do so at any moment, roofs leaking to such an extent as to involve destruction of property, wharves rotting and falling into the water and others so defective that they cannot be used, water service defective on account of worn-out pipes, and a complaint of decay that implies general destruction.

The small appropriations for the past year have been expended with the greatest economy, and as much done as was possible with the limited amount to arrest this deterioration of the Government property, but being so inadequate it has had but little effect.

Under these circumstances I hope that the attention of Congress will be earnestly called to the urgent necessity for an appropriation of adequate amounts to repair and preserve our defective wharves, waterfront, and buildings, and to put in order and extend our meager docking facilities.

True economy, good administration, and proper attention to the present as well as the future needs of our naval establishment alike require it.

I beg especially to call your attention to the inadequate facilities existing in our navy-yards for docking our vessels. The modern vessels just constructed and authorized will be mainly without sheathing for their bottoms, and will require periodical docking to keep them in proper condition and to maintain their speed. In addition to this, the increase in length and breadth in vessels of recent design and construction require docks of greater dimensions than those now existing on the Atlantic coast.

At present there are but three dry-docks belonging to the Government on this coast, and, as it will be seen when the yards are treated separately, they are not in proper condition. When the dock at New York will be closed temporarily for the repairs authorized at the last session of Congress there will be but one—at Boston—with sufficient capacity to dock the vessels of the first rate now borne on the naval list.

Our own experience, as well as that of all other naval and maritime countries, places beyond reasonable dispute the superiority of excavated dry-docks over any other means of docking, and the greater cost and length of time formerly required in building these docks has been very materially reduced in the wooden dry-docks on the Simpson plan, which have been successfully in use in several ports on the Atlantic coast for a number of years.

I would submit, as a matter for your consideration, the question of the advisability of providing dry-docks at comparatively remote places, which are frequented by merchant shipping, for the use of the Navy in combination with the merchant marine.

Such places as Puget Sound, in the extreme Northwest, and Pensacola, on the Gulf of Mexico, would be cases in point where timber for wooden dry-docks abound and where no facilities for docking exist.

In addition these docks would add greatly to the resources and facilities for the naval defense of these waters in time of war. At present

there are no large dry-docks in the United States nearer Pensacola than Norfolk, Va., and nearer Puget Sound than San Francisco. The means for accomplishing this can readily be effected either by the construction and maintenance of these docks by this Department, charging moderate dues for docking merchant vessels, or by assisting private parties by advance of money or grants of land, with the condition that Government vessels be docked free of cost forever, and that the United States have control in time of war or of certain emergencies.

A precedent for the latter plan has already been established in other countries and recently in the United States by the grant of Government land in Baltimore to a dry-dock company upon the condition that all Government vessels be docked free of charge.

Under the heads of the different yards and stations I will now proceed to submit my views upon such objects and estimates as are deemed worthy of special mention and treatment.

NAVY-YARD, PORTSMOUTH, N. H.

The floating balance dock at this yard requires extensive repairs to put it in proper condition, and \$20,000 is asked for this purpose, the amount being included in the general estimate for repairs and preservation.

The water service has been improved in this yard by the erection of a windmill, which obviates the expensive method previously employed of using the fire-engines for the purpose of distribution. The amount of water is, however, still insufficient, and \$9,500 is again asked for, to increase the storage capacity by cleaning out the ponds from which the water is supplied and for the erection of a new reservoir.

NAVY-YARD, BOSTON, MASS.

This being a closed yard, but a very small amount was allotted for expenditure under the heads "maintenance" or "repairs," &c. The money allowed was judiciously and economically expended upon those objects which seemed to more immediately demand it. This navy-yard, with its fine buildings and machinery, large dry-dock, and extensive water front, is, of all the navy-yards, the worst in its condition of deterioration and general want of repair.

The Commandant of the yard presents a doleful picture of the dilapidated state of the wharves, dry-dock, water pipes, roads, and buildings; and, in finishing his description of the condition of affairs, he says that "everything is fast coming to that state where only the most extensive repairs can prevent utter destruction."

This statement, though a strong one, I know to be correct and entirely without exaggeration, from two personal and careful inspections of the yard made by me within the last six months.

Three of the six wharves are so much decayed as to be unserviceable and dangerous. An appropriation of \$50,000 is required to repair and put them in condition for use. The wooden caisson of the dry-dock is in such a condition as to need replacing at once; the swinging gates are out of order, and if the caisson fails the dock cannot be used, no matter how great the need. An appropriation of \$31,009.88 is asked for to build a new one of iron.

An appropriation of \$32,337.88 is required to renew and repair the water pipes, now in very bad condition, \$4,000 for a new cart-shed, and \$11,000 to repair the quarters for officers.

NAVY-YARD, NEW YORK, N. Y.

At this yard much has been done with the small amounts allowed. The following are the works of improvement that have been going on during the fiscal year:

The repairs to the North river front of the cob dock and saluting battery, commenced the latter part of the last fiscal year, was continued without interruption, and completed in a substantial manner January 5, 1886.

The work in dredging the Wallabout Channel, removing broken crib-work that had fallen into the channel, and dredging out the crib work that was encountered May 16, 1906, and is being continued.

[illegible]

the first of these of greater dimensions in length and width is 16
inches long and 12 inches wide.

2. The fact that the above is a confidential source does not make the information so confidential that it is exempt from the public release policy of the FBI.

The following is a list of the names of the persons who have been appointed to the various positions in the various departments of the Government of the State of New York, for the year 1900.

THE UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D. C. 20246

THE UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D. C. 20250

1. <u>NAME</u>	2. <u>DATE</u>	3. <u>TIME</u>	4. <u>LOCATION</u>
1. <u>NAME</u>	2. <u>DATE</u>	3. <u>TIME</u>	4. <u>LOCATION</u>
1. <u>NAME</u>	2. <u>DATE</u>	3. <u>TIME</u>	4. <u>LOCATION</u>
1. <u>NAME</u>	2. <u>DATE</u>	3. <u>TIME</u>	4. <u>LOCATION</u>

— *Journal of the American Medical Association*, 1997

1. The first of these is the fact that the Government has not been able to secure the necessary funds to carry out its policy. This is due to the fact that the Government has not been able to secure the necessary funds to carry out its policy.

1. The first step is to identify the problem.

... ..

[illegible]

SECRET

[illegible]

NAVY-YARD, NORFOLK, VA.

The importance of this navy-yard cannot be overestimated, its geographical position and its importance as an indispensable adjunct to the naval defense of the National Capital, Hampton Roads, and the waters of the Chesapeake show its great value. In addition, the mildness of climate enables out-door work to go on continuously, and its water and railroad communications insure unlimited supplies of coal and iron for manufacturing purposes.

It should be the fixed purpose of the Department to continue improvements at this point until the yard is placed in an efficient condition and provided with a modern plant. The first improvement recommended is a new dry-dock, which is especially required here on account of the want of size of the present one, which is unable to take vessels of the Tennessee and Chicago class, or the larger vessels lately authorized.

An appropriation of \$600,000 is asked for the purpose of constructing this dry-dock of timber on the Simpson plan. As the old pumps and engines of the present dock are worn out, an appropriation of \$52,000 is asked to replace them in a proper engine-house.

For the extension of the permanent water front by the completion of the quay wall \$110,000 is asked.

For the extension of the present partially completed system of railroad tracks, the supply of additional cars, motive power, and an engine-house, the sum of \$47,479.87 is asked. For providing a system of water pipes, \$17,811.87. For the construction of quarters for two officers, not otherwise provided, \$12,000.

No works of improvement have been done at this yard. The ordinary repairs upon the buildings, wharves, and roads were made as far as the small amount allotted would permit, every dollar of which has been expended with the greatest economy.

NAVY-YARD, MARE ISLAND, CAL.

The rapid and steady increase in the wealth, population, and importance of the Pacific coast of the United States, the great length of the shores of the territory, the most extensive belt by any one country on the west coast of America, and finally the importance to us of the water communication along the coast, render the naval control of the west coast of North America a vital necessity to us for inter-communication, for protection of our trade, and the defense of our domain. The recent acquisitions by European naval powers of various islands in the Pacific, which at once creates a rendezvous for their naval forces, doubtless to be followed by the establishment of naval stations, shows the transfer, to a great extent, of naval activity at present and in the future to that ocean.

In addition, it is humiliating to think that it is within the range of possibility that our wealth and defenseless condition on this coast may serve to tempt an attack from the adventurers or others who may have the governing power of any little insular or coast nationality with sufficient resources to obtain two or three modern armored vessels.

The now dominating naval power on the coast, Great Britain, not only has begun to enter into rivalry with us here in trade and commerce, but also in creating military and naval resources for offense and defense. With their naval station and dock yard at Esquimaux, in British Columbia, they already command our communication with the Alaskan territory, and render it imperatively necessary that our only naval station

on the Pacific coast shall be fully supplied with resources necessary to sustain in magnitude and completeness the importance which, from its geographical position, this yard has among the naval stations of the world.

During the past fiscal year work has steadily progressed upon the dry-dock, and since my last annual report great advance toward completion has been made upon this important work.

In June last the coffer-dam about the entrance of the dock was removed and the caisson or floating gate put in place. When the work had advanced sufficiently, advertisements were published for proposals to remove the coffer-dam. In response a number of bids were received, the lowest amounting to \$39,750; this being so much in excess of the estimate of the civil engineer of the yard, it was considered that the interests of the Government required its rejection. Proposals were again asked for by advertisement for four weeks, in accordance with law, and five bids lower than the previous lowest bidder were offered. When the contract was awarded to the lowest bidder, he refused to execute the contract, being followed in his refusal in turn by the next four lowest bidders, leaving as the lowest bidder the one who was lowest under the first advertisement, and whose offer in this case was \$39,000.

Under these circumstances with the, to say the least, peculiar action of the five lowest bidders under the second advertisement, it was determined by the Bureau to take the matter in its own hands, and to do the work with its own resources and employés in the yard under the charge of Civil Engineer Wolcott.

The result showed the wisdom of this decision, as the coffer-dam was removed and the entrance dredged to a sufficient depth to allow the admission of the largest vessels at a cost of \$20,492.19, thus saving \$18,507.81. The interesting report of the civil engineer relating the manner in which the work was done is appended as a part of this report.

Proposals were also asked for the construction of the boilers for the dry-dock pumps. The lowest bid received was \$26,200. This being considered excessive the Bureau determined to construct them in the yard. Under the intelligent and energetic superintendence of Chief Engineer Kutz, U. S. Navy, they were completed for \$19,000, a saving of \$7,200.

The iron crane, for which \$40,000 was appropriated, is now under construction in the navy-yard, the tenders from outside parties being largely in excess of both the estimate and appropriation. It will be completed, within the amount appropriated, by the latter part of December next. The cost of granite for the dry-dock in former years was \$2.92, \$2.05, \$2.35, and \$2.75 per cubic foot; last year it was obtained for \$1.29 per cubic foot, the civil engineer in charge of the work stating that it is equal to any granite heretofore delivered.

For the purpose of testing the pumps of the dry-dock after they had been erected, the dock was filled with water, incidentally testing in this way at the same time the caisson and other completed appurtenances of this great structure. The results of the trial were in every way most gratifying, the pumps emptying the dock, employing full power, in fifty-five minutes. They have been pronounced by experts to be the most effective pumps for the purpose for which they are intended in the world.

The sewerage system, for which an appropriation was made, has been carefully constructed, with most excellent material, within the amount appropriated. This long-felt necessity has now been supplied, relieving

the yard from a possible cause of disease. The artesian well, for which an appropriation was made, was commenced under contract duly awarded September 28, 1885. At the end of the fiscal year a depth of 705 feet was reached. Since then the work has been temporarily suspended, owing to financial troubles in which the contractor became involved.

Estimates are herewith submitted for \$4,200 for the completion of the floor of the boiler shop and the proper foundation for the heavy tools now on hand and awaiting a firm support; and likewise \$5,755.40 for the completion of the floor and foundations of the iron-plating shop. This is necessary to put these establishments in proper working order.

I hereby submit an estimate of \$16,664.09 for the removal of the gas-holder from its present place and its erection in another locality; also \$3,109.15 for the renewal of the gas mains and pipes of the yard. I beg to call attention to the urgency of this, as the present gas-holder is situated in the courts of the smithery shops of the yard, exposed to the constant danger of explosion, which would involve loss of life and much destruction of Government property. At the same time this most urgent work is undertaken, advantage should be taken to renew entirely the system of gas mains and pipes throughout the yard, which are worn out and cause an extravagant expenditure of gas.

On account of the heavy rains at portions of the year it is particularly important to put the roads of this yard in good order, for which purpose an estimate of \$15,000 is submitted. For proper landings along the water front \$5,000 is asked. For storage cisterns for fire purposes, also important during the dry season of this coast, an appropriation of \$46,364.30 is asked. For an extension of the quay wall of this yard, to afford additional permanent water front, an estimate for \$110,000 is submitted.

NAVAL STATIONS, ETC.

NAVAL STATION, NEW LONDON, CONN.

No work of any kind has been done, or is proposed, at this station, and only such expenditures incurred as was necessary to properly care for the public property now there. In view of the fact that other navy-yards already established urgently need money for repairs, preservation, and extension of facilities, it is not the intention of the Bureau to ask for an appropriation to create a yard here.

NAVY-YARD, WASHINGTON, D. C.

This yard has been turned over to the Bureau of Ordnance for the exclusive purpose of manufacturing ordnance, hence no appropriation is asked for this place for improvements.

NAVAL STATION, PORT ROYAL, S. C.

Since the last report the wharf at this coaling station has been completed. The store-house and coal-shed appropriated for at the last session of Congress is contracted for, and, under ordinary circumstances, should be completed before the end of the fiscal year.

An appropriation of \$4,000.00 is asked for the construction of an office and house, in one, for the officer in charge of the station; also \$1,000 for an artesian well, \$562.60 for a sea-wall, and \$167.25 for wire fencing about the place.

NAVAL STATION, KEY WEST, FLA.

Some improvement in the coaling facilities was made at this point out of the limited current appropriations for maintenance. An estimate is here offered for the construction of quarters of the two officers of this station of \$8,000. By the recent fire, which almost entirely destroyed

this town, the facilities for living in a decent manner are most meager, and it is no more than bare justice that the Government should provide quarters for those stationed at this remote but important coaling station.

An adjustable stern dock would be most useful here, and its purchase is recommended.

NAVY-YARD, PENSACOLA, FLA.

This yard has been closed for all general work and only the amount necessary to care for public property has been expended in the past fiscal year or is asked for under the general appropriation this year.

The appropriation of sufficient money for the purchase of an adjustable stern dock is recommended for this place.

NAVAL STATION, SACKETT'S HARBOR, N. Y.

The remarks made above apply also to this station.

NAVAL ASYLUM, PHILADELPHIA, PA.

The expenditures at this institution for the fiscal year ending June 30, 1886, are as follows:

Pay and pocket-money of beneficiaries.....	\$4,312 56
Tobacco	1,068 88
Clothing, boots, and shoes.....	8,073 33
Subsistence.....	20,436 90
Paints, dry goods, lumber, coal and wood, provender, hardware, miscellaneous and house sundries.....	9,383 46
For support of beneficiaries.....	43,275 13
Pay of employes	8,998 67
Repairs to buildings, for grates, furnaces, ranges, furniture, and repairs to furniture	4,470 74
Water rent and gas	1,493 98
Cemetery, burial expenses, and headstones.....	166 87
Improvement of grounds	499 87
Total expenditures for year 1885-'86	58,905 25

Estimates are respectfully submitted for the Naval Asylum for the fiscal year ending June 30, 1888, as follows:

For pay and pocket-money for beneficiaries.....	\$6,600 00
For clothing, boots, and shoes.....	10,000 00
For tobacco.....	1,100 00
For provisions	24,000 00
For ice	400 00
For coal and wood	3,000 00
For stores of dry goods, paints, lumber, provender, hardware, miscellaneous and house sundries.....	8,000 00
Total support of beneficiaries.....	53,100 00
For transportation of indigent and destitute beneficiaries to Asylum	500 00
For pay of employes.....	10,061 00
For water rent and gas.....	1,800 00
For cemetery, burial expenses, and headstones	350 00
For improvement of grounds	500 00
For repairs to buildings, furnaces, grates, ranges, furniture, and repairs to furniture	4,500 00
For music in chapel.....	600 00
For erection of brick building in rear of main building for kitchen, laundry, and servants' rooms	15,000 00
For fitting up bath-room with twelve tubs for beneficiaries	800 00
For removing range, laundry, boilers, and tubs to new building, and for plumbing.....	400 00
Total for year ending June 30, 1888.....	87,611 00

Commodore Bancroft Gherardi, U. S. Navy, who, for the greater part of the last fiscal year, has most successfully administered the affairs of this institution, reports that the conduct of the beneficiaries during the past year has, with a few exceptions, been very satisfactory and commendable.

As large a liberty as is consistent with good order and administration and a proper accountability is granted the beneficiaries, and the constant endeavor of the Bureau is to make of the institution a comfortable home for the disabled men of the Navy and Marine Corps.

In this connection it is recommended that the name of the asylum be changed to the "U. S. Naval Home," in order to more exactly describe its character and represent the intentions of its foundation. The institutions for similar purposes for the regular and volunteer soldiers of the United States now bear the name of homes. The following table shows the changes during the past fiscal year:

On rolls July 1, 1885	120
Admissions, year ending June 30, 1886	20
Readmissions	5
	<hr/> 24
Died during the year ending June 30 1886	16
Dropped for absence without leave	4
Discharged at his own request	1
Dismissed for misconduct.....	4
	<hr/> 25
On rolls July 1, 1886	201

During the year improvement has been made in the issue of clothing, in the plumbing, &c., of the water-closets, in providing a new and improved range, enlarging the dining-room, and the purchase of an improved refrigerator.

The steady increase in the number of beneficiaries at the Asylum, though slow, has caused the main building to be in a crowded condition and has been the matter of report for some years past. A provision for increased accommodation has been made by adapting quarters previously occupied by the chaplain and paymaster for the use of the beneficiaries.

A large portion of the building, though obliged to be used for the living apartments of the men, is unsuited for this purpose, this being especially the case with the basement and the attics in summer. In view of these circumstances the Bureau took advantage of the fact that one wing of the Naval-Hospital building in the grounds, which was built as an extension of the Asylum facilities, was entirely unoccupied and could be partitioned off into forty rooms for the beneficiaries. This has been done under the direction of the governor of the Asylum, in an entirely satisfactory manner, at a very small cost, and as soon as the proper furniture will be provided the rooms will be in condition for occupancy. The remaining portion of the hospital building is more than ample for the use of the patients, the larger portion of whom are beneficiaries from the Asylum.

In the estimates submitted the following items are especially urged upon your attention: An estimate for \$500 is given for the transportation of men who have been granted a permit to enter the Asylum, but who being out of the service are from poverty unable to pay their transportation to the Asylum. The Bureau has no means whatever to defray these expenses, and it is but justice that the disabled servant of the nation should not be compelled to beg for means to reach the Asylum after he has received a permit to enter. Applicants are liable to come from any portion of the United States, and a grant of \$500 is asked for this purpose, which if appropriated will be carefully expended.

The sum of \$600 is asked for under the item of "music in chapel" &c. For more than thirty years past the services in the chapel, the governor states, have been accompanied by music on the organ provided for that purpose, and by the voice. Congress having failed to make appropriation specially for this purpose for the present fiscal year, the music has been discontinued, to the regret of all interested in the chapel services.

The sum estimated will be sufficient to provide music for the beneficiaries for the purposes of entertainment on other occasions. When it is considered that the Asylum is supported and all the facilities provided from the income of the Navy pension fund, a fund created directly by the exertions of the officers and men of the service, it seems but little more than just that in this and other matters the comfort and recreation of the old men, worn out in the service, should be generously considered.

The Bureau approves of the repeated recommendation of the governor of the Asylum for increase of pay of the employes: especially is this necessary in regard to the chief cook and the assistant cooks. It is a matter so directly connected with the daily life of the inmates that pay commanding a better grade of employes in this particular will be felt most sensibly and constantly by them. The necessity for the erection of the brick building in rear of the main building for kitchen, laundry, and other purposes still remains. The present kitchen and laundry, both inadequate for the purpose, are situated in the basement directly under the quarters of the officers and men, rendering them hot and uncomfortable in the summer. In addition, quarters will be provided in the same building for the female employes, removing them from the main building and contributing generally to good order and a proper state of affairs.

During the year Congress has granted the right of way through the part of the grounds known as the Asylum wharf property to the Schuylkill River East Side Railroad Company, upon the payment of damages, and under certain restrictions. The preliminary conditions having been complied with, the railroad has now been constructed. This adds one more to the many reasons why the consideration of the question of the selection of another site, removed from the midst of a large city, should be seriously discussed. As the selection of another site and the erection of the necessary buildings, &c., will take a long period of time, everything herein asked for is necessary, both for the present and for the immediate future.

CONTINGENT.

The sum required under this head, \$40,000, is to meet unforeseen emergencies and accidents that may arise calling for an immediate outlay.

GENERAL MAINTENANCE.

The most pressing and necessary expenditures of the different yards come under this head, such as repairs of fire-engines, purchases of horses and oxen and their maintenance, carts and tools, coal, water, and gas, telegrams, incidental labor, pay of watchmen, cleaning yards, the care of buildings, purchase of and care of machinery of every description, rents, &c. The need for the amount estimated is consequently obvious. On account of the reduced appropriations of the past few years there has been a deficiency caused in the state of the fire service, live stock, vehicles, furniture, and general cleaning and care of the yards.

PAPERS ACCOMPANYING THE
REPAIRS AND PRESERVATION.

The necessity for a great increase over the very meager appropriations of the past few years for the purpose of repairs and preservation of the permanent works and improvements of the various stations has been set forth generally and in detail in the beginning of this report.

On account of the want of sufficient appropriations there has not been proper care and preservation of the public property coming under the charge of this Bureau.

An estimate of \$800,000 is made for this purpose.
The entire amount asked for by the Bureau is \$4,611,756.13, the detail of which is contained on the tabulated sheets Nos. 1 to 6, inclusive, recapitulated as follows:

Sheet No. 1. For support of Bureau of Yards and Docks.....	\$11,960 00
Sheet No. 2. For general maintenance and contingent	340,000 00
Sheet No. 3. For support of Naval Asylum	87,611 00
Sheet No. 4. For repairs and preservation	800,000 00
Sheet No. 5. For improvements at navy-yards	3,308,961 16
Sheet No. 6. For civil establishment	63,203 97
Total	4,611,756 13
* * * * *	*

Accompanying this report is an abstract of offers for supplies received for furnishing articles coming under the cognizance of the Bureau of Yards and Docks, made in conformity to act of Congress approved March 3, 1843.

A statement showing the amount expended under each specific head of appropriation during the fiscal year ending June 30, 1886, and the balances remaining unexpended June 30, as required by section 429, Revised Statutes, is appended.

Also a report showing amount expended during the fiscal year ending June 30, 1886, from appropriations pertaining to this Bureau for civilians employed on clerical duty or in any other capacity than as ordinary mechanics and workingmen at the several navy-yards, with estimates for the same for the fiscal year ending June 30, 1888, in compliance with the third section of naval appropriation act approved January 30, 1885.

I am, very respectfully, your obedient servant,
D. B. HARMONY,
Chief of Bureau.

Hon. WILLIAM C. WHITNEY,
Secretary of the Navy.

REPORT OF THE CHIEF OF THE BUREAU OF NAVIGATION.

BUREAU OF NAVIGATION, NAVY DEPARTMENT,
Washington, November 9, 1886.

SIR: I have the honor to submit the annual report of the operations of the Bureau of Navigation for the past year, together with the estimates for its support, and for the expenditures that will, in my opinion, be necessary for the naval service during the fiscal year ending June 30, 1888. Included in this report, and transmitted herewith, are the reports and estimates of the several offices under its control, as well as the statements required by section 429 of the Revised Statutes of the United States, and by the third section of the naval appropriation act approved January 30, 1885.

NAVIGATION.

Compasses.—Thirty-eight compasses have been repaired and thirty-five new compasses have been purchased since my last annual report, conforming in all respects to the requirements adopted by the Bureau. Valuable information continues to be received in the compass reports from vessels of the Navy afloat.

An extensive series of experiments has been carried on by the superintendent of compasses for the purpose of testing the efficiency of the new compensating binnacle, and in its completed state it is now accurate in principle and construction. The Atlanta, Boston, and Dolphin have been supplied with these binnacles, the most favorable position for the standard compasses having been determined by a series of vibration observations with delicate magnetic needles. Observations for determining the magnetic condition of these three ships have been continued, and the results now filed in the Bureau are valuable as giving the magnetic history of the ships since they were launched. The special work on board the Atlanta at Newport, and the Boston during her passage from Chester to New York, developed some interesting facts in relation to the action of their compasses, which are considered so important that the reports are forwarded with the report of the superintendent of compasses.

Compass-testing houses.—The compass-testing houses will shortly be completed, and it is expected that the magnetic instruments will be mounted and in readiness for observations by January next.

Navigation supplies.—As a result of the extended competitive trial of forty-five chronometers submitted by American makers, which took place recently at the Naval Observatory, thirteen passed the tests and were accepted by the Bureau. It is proposed to continue these trials next year, and to purchase as many of the successful chronometers as circumstances will admit. Improved sextants and marine glasses have been purchased in such quantities as the limited appropriation allowed.

Single incandescent electric lighting plants have been installed in the Atlanta and Boston, the former by the United States Electric Lighting Company, the latter by the Brush Electric Company, and bids have been invited by advertisement for proposals for installing a double plant in the Chicago. It is of course very desirable to depend entirely upon the electric lights when such plants are supplied, but this can only be assured by duplicating them.

This method of lighting ships of war, owing to the small amount of heat given off, the absence of disagreeable odors, and the more perfect illumination, adds much to the health and comfort of the officers and men, tends to make them contented and happy during their long absences from home and friends, promotes discipline, and prevents crime.

Photographic outfits.—Much progress has recently been made in instantaneous marine photography, and as the process can now be successfully carried out underway on ship-board, it is my intention to supply our cruising ships with photographic outfits as rapidly as practicable. Several have already been furnished, and the copies from negatives taken of headlands, rocks, &c., render official reports of greater interest and value to the Government and to scientific men.

Deep-sea sounding machines.—The Juniata and the Essex, before sailing for the Pacific and China stations, were fitted with complete deep-sea sounding apparatus, which will render it possible to take deep-sea soundings in localities the depths of which have not yet been determined, and enable the Bureau to ascertain whether or not certain shoals re-

ported in the Atlantic and Pacific Oceans, and now shown on charts really exist. In this connection I would state that ships of war should be supplied with deep sea sounding machines and reeling-in engines by which, without material interference with their regular duties, in time of peace, soundings could often be taken and much more information be added to our knowledge of the ocean depths. For this purpose increased appropriations are necessary.

Libraries.—Further additions of professional books have been made to the libraries of cruising ships; and Professional Paper No. 19, "The Variation of the Compass," and No. 20, entitled "Naval Brigade, and Operations Ashore," have been published and distributed among the officers of the Navy. The first-mentioned paper was prepared from observations made in different parts of the world by the navigators of vessels of the Navy, to accurately determine the variation of the compass, with the intention of ultimately publishing a correct general variation chart for the use of navigators. Professional Paper No. 20 was prepared by First Lieut. H. K. Gilman, U. S. Marine Corps, for the instruction and use of officers and men when it becomes necessary for a naval force to operate on shore.

Signal books.—The revision of the general signal book referred to in my last annual report, has been completed. The modifications which have been proposed to the tactical signal book have been embodied in manuscript, but it will be necessary to subject them to a series of extended practical trials before it can be determined whether or not they are advantageous. These trials can only be carried out successfully by a number of ships remaining together at sea in one squadron for a considerable time. Very important data relating to the manœuvring powers of ships, and the consequent tactics to be observed in battle may, however, be obtained by determining the relative speeds and tactical diameters of our larger tugs, and then exercising them together as a squadron, both in smooth water and under the varying conditions to be met with at sea. For this purpose I would recommend that four tugs of the same class be prepared for this work, and that during the coming spring and summer they be officered and manned, forming a "squadron of evolution," now considered necessary by all foreign Governments for the intelligent instruction of the personnel.

Ocean surveys.—The *Ranger* has been employed in sounding in the Pacific Ocean off the coast of Lower California, in continuing the triangulation of that coast from points established by the Coast Survey in California, and in examining the same locality, with the object of perfecting the charts already prepared from the survey made under the Bureau.

It is proposed that the *Ranger* shall continue and complete this examination, after which she is to search for the rocks and shoals which have been reported to exist in the North Pacific Ocean in the track of vessels bound to San Francisco. When the *Thetis*, now fitting out at New York as a surveying ship, is ready, it is proposed to send her to the Spanish Main to correct the errors on charts published from the old Spanish surveys, after which she should go to the Pacific to search for the many dangers to navigation reported to exist in that ocean, and to accurately determine the geographical positions of some of the numerous islands which are known to be incorrectly placed on the charts now in use by navigators.

Department library.—There has been a steady increase in the number of professional books added to the library, and an improvement in their arrangement and in the facilities for their use. The collection is yearly

becoming more important to the work of the Department, but it is at present affected by the reduction of the annual appropriation from \$2,500 to \$1,000. As the appropriation is expended with care and judgment and the sum formerly appropriated is necessary to keep the Department abreast of the times in professional investigation, I would recommend that the appropriation be restored to its original figure.

Publication of war records.—The progress made in the collection, arrangement, and copying of the naval war records for publication has been as rapid as the limited force of clerks and copyists provided for by Congress would allow, and in this connection I would renew the suggestion made last year for a sufficient appropriation to push this important work to completion.

Naval War College.—During the past year water has been introduced into the building; a sewer built to connect it with the sea; the foundation cemented and drained; the first and second stories thoroughly repaired, and the necessary changes made to adapt them to the purpose for which the building is to be used. It was intended to put the entire building in complete repair this year, but the appropriation was only sufficient to authorize contracts to be made for the repair of the basement, work on which is now progressing.

The second session of the college opened September 6, with a class of twenty-one officers of the Navy and Marine Corps, and will close on the 20th of November. The course was begun with lectures by Rear-Admiral Lace, commanding the naval force on the North Atlantic station, explanatory of the necessity which exists for the close study of the art of war, and the advantages to be derived from the establishment of the War College for this purpose. Full courses of lectures on naval tactics, naval warfare, the practice of gunnery, marine international law, military hygiene, military science, and coast defenses, were delivered by Commander Hoff, Captain Mahan, Lieutenant Meigs, Professor Soley, and Medical Director Dean, U. S. Navy, Lieutenant Bliss, United States Army, Commander Goodrich, United States Navy, and Captain Bixby, U. S. Army. Lectures on the duties of a general staff, on the preservation of iron and steel ships, and on the deviation of the compass, were delivered by Lieut. C. C. Rogers, Assistant Naval Constructor Gatewood, and Lieutenant Cornwell, U. S. Navy. The course was supplemented by additional lectures from General J. C. Palfrey, and John O. Ropes, esq., who again kindly volunteered their services without compensation. General G. H. Gordon had also again volunteered his services, but his untimely decease prevented the class from meeting that distinguished officer.

The advanced course of instruction on subjects directly connected with the art of war has been this year, so far as it was practicable, illustrated by practical exercises ashore and afloat, the waters of Narragansett Bay and their proximity to the sea offering peculiar advantages not to be found elsewhere. The Naval War College may now be said to be fairly established, and I beg to commend it to the earnest support of the Department.

Hydrographic Office.—I beg leave to call attention to the detailed report of the Hydrographer for the past year.

Through the branch offices much information has been obtained that is useful in the Hydrographic Office, and in return the mercantile marine has been largely benefited by the distribution of information contained in the publications of the Navy Department.

Requests for the establishment of branch offices have been received from the mercantile communities of several of the large seaports of the

Atlantic and Pacific coasts, but in consequence of the limited appropriations which have so far been granted, it has not been practicable to comply with these reasonable requests.

The appropriation made at the last session of Congress for the preparation and publication of the surveys of the Mexican coast, enabled the Hydrographer to prepare the charts of surveys made in the *Ranger* of the Pacific coast from San Diego to Panama, for the publication of which additional appropriations will be required.

Naval Observatory.—The details of the astronomical work performed with the various instruments since the date of my last report, together with a statement of the distribution of the work of the Observatory at present, are contained in the report of the Superintendent. The examination at the Observatory of such of the instruments as are supplied to ships by this Bureau continues to give satisfactory results. A large proportion of the sextants in use for many years were, upon examination, found to be defective and unfit for issue, while such of them as could be repaired have been put in serviceable condition. In this connection I desire to suggest that legislation be requested authorizing the destruction of such chronometers and sextants as are found to be no longer reliable. The law requires them to be sold; but to sell chronometers and sextants which are pronounced unfit for issue to the naval service, is to tempt unprincipled persons to buy them at small cost and resell them to unsuspecting dealers or masters of vessels, whereby errors in navigation may result in the loss of ships and cargoes.

In accordance with authority contained in the act approved July 26, 1886, steps have been taken to commence the erection of the new Naval Observatory on the site purchased by the Government for that purpose. In conformity with a provision in the same act, and, by the direction of the Department, the instruments which were purchased for the use of the Transit-of-Venus Commission have been delivered into the custody of the Superintendent.

Nautical Almanac.—An account of the progress made in the preparation and sale of the regular annual publications of this office is given in the report of the Superintendent; and I desire to invite your attention to the fact that the printing of these volumes, which must necessarily be done in advance, has fallen considerably behind at the Government Printing Office.

RECOMMENDATIONS.

I beg leave to bring to your attention the suggestions and recommendations which have been submitted in previous annual reports relating to the ill effects likely to result from delay in obtaining for publication in the Naval War Records the papers now in private hands, and necessary for a complete narrative of the operations of the Navy during the civil war; to the advantages to be derived from placing the library of the Navy Department on the same footing regarding the binding of books as the libraries of the Department of State, the Patent Office, and the Surgeon-General's Office; to the remarks relating to the character of the building in which the engraving of plates and printing of charts is carried on for the Hydrographic Office, which prevents the plates from being stored there and subjects them to risk of injury on removal, and which causes loss and inferior work on account of the unfavorable conditions of light and temperature, and the large amount of vibration; to the importance of establishing compass stations at the large sea-ports of the Atlantic and Pacific coasts, for the purpose of determining the compass errors in ships of the merchant

marine; to the advisability of extending the system of time-balls for the benefit of the maritime community; to the suggestion favoring an international congress to consider the adoption of a universal system of marks and buoys for channels and harbors; and to the suggestion to the desirability of increasing the pay of the instrument-maker of the Naval Observatory.

ESTIMATES.

In submitting the estimates for the coming fiscal year, I would again call your attention to the impossibility of efficiently administering the Bureau without sufficient appropriations. Upon this subject I beg to quote from the two last annual reports, as follows:

I beg to invite your attention to the annual appropriations of this Bureau, which have steadily decreased in amount from \$192,500 for the fiscal year of 1866-'67, to \$90,000 for the year 1883-'84. Since the year 1866 the amount appropriated annually to carry on the work under the cognizance of this Bureau has been insufficient to supply our vessels with the best and most improved articles of navigation outfit. In consequence, however, of the quantity of supplies purchased during the civil war, and remaining on hand at its close, cruising ships have been furnished with instruments for navigation which, if not of the latest patterns, still answer the purpose for which they were purchased in the absence of better. But the supplies above mentioned have gradually been exhausted or have become obsolete, and have been sold as "unservicable," in compliance with the act of Congress approved August 5, 1882, which required all stores and supplies to be appraised, and those found to be "unservicable" to be sold. (Report of 1884.)

The supply of articles of navigation outfit has still further decreased since the above was written, while the appropriation for the fiscal year ending June 30, 1885, is \$87,500, a reduction of \$2,500 on the amount of the previous year. The appropriation of the present fiscal year is \$87,500, which is \$42,500 less than the estimates. I have submitted estimates for \$130,000, an amount which in my opinion is necessary for the efficient administration of this Bureau, and without which it will not be practicable to supply our cruising vessels with the improved outfits required for the safe navigation of modern ships of war. (Report of 1885.)

I have only to add that the amount appropriated for the present fiscal year, under the head of "Navigation," was \$83,500.

Very respectfully, your obedient servant,

J. G. WALKER,
Chief of Bureau.

The SECRETARY OF THE NAVY.

REPORT OF THE CHIEF OF THE BUREAU OF ORDNANCE.

BUREAU OF ORDNANCE, NAVY DEPARTMENT,
Washington City, November 10, 1886.

SIR: I have the honor to submit the annual report of this Bureau, and also to transmit estimates for the fiscal year ending June 30, 1888:

1) Fuel, tools, material, and labor; batteries of the new types for six ships now in service; towards the general armament of the Navy with modern secondary batteries and small-arms; proof of naval armaments; modern armament of two practice ships for the training squadron, and establishment of a proving and ranging ground	\$1,026,750 00
2) General repairs to ordnance buildings, magazines, and appendages	15,000 00
3) Freight and miscellaneous expenses	5,000 00
4) Civil establishment at navy-yards	26,960 50
5) General expenses of the Torpedo Station; two steam launches for instruction and experiment; extension to electrical laboratory, and repairs to the sea-wall	72,500 00

Atlantic and Pacific coasts, but in consequence of the limited appropriations which have so far been granted, it has not been practicable to comply with these reasonable requests.

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J. G. WALKER,
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The SECRETARY OF THE NAVY.

REPORT OF THE CHIEF OF THE BUREAU OF ORDNANCE.

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(3) Freight and miscellaneous expenses	5,000 00
(4) Civil establishment at navy-yards	26,960 50
(5) General expenses of the Torpedo Station; two steam launches for instruction and experiment; extension to electrical laboratory, and repairs to the sea-wall	78,500 00

(6) General maintenance of the Washington navy-yard (arsenal)....	\$25,000 00
(7) For the civil establishment in connection with the above main- tenance	4 25 51
(8) Towards the armament of vessels authorized	1,700 00 00
	<hr/> 2,741,451 51

CANNON.

Since the last report was made a considerable number of the 6 inch high-power steel guns have been finished and fired at the Naval Ordnance Proving Ground.

They have all endured proof in a very satisfactory manner, and over 2,000 feet muzzle velocity was readily obtained with standard powder and projectiles and moderate chamber pressures.

The two 5-inch guns for the Chicago have been finished since the last report. One has been fired at the proving ground, and the results are very satisfactory, although the powder used was not made for the gun. A powder will be made for this caliber.

The first 8-inch gun finished has also been proved, with most satisfactory results.

The powder used in this last caliber was Westphalian brown, as no opportunity had occurred for grading American brown powder to this caliber.

The matter, however, presents no serious difficulty, and will be proceeded with at once.

Chase and muzzle hoops for heavy guns have been made in the United States, and, as far as fitted, are satisfactory in quality.

No practical difficulty is encountered in the manufacture and fitting of the different parts of the guns.

The compression of the bore obtained by assembling is satisfactory.

The breech mechanism is found to work well; the action of the gas-checks is very efficient, and the flight of the projectiles is smooth and steady.

The two 10-inch guns referred to in the last report are well advanced. They are assembled; one is smooth-bored, and the rifling will commence speedily.

A 10 inch carriage adapted to use in the monitors will be completed about the time the guns are finished, so they can be proved together.

All the forgings ordered from Sir Joseph Whitworth & Co. for the 10½-inch type gun have been received. Additional chase hoops will be required, but they can be made in the United States.

As no funds have heretofore been available for work on this gun, no progress has been made on it.

The elaboration of a simple and convenient lock for high-power breech-loading guns has offered considerable difficulty, and a good many forms have been devised, most of which have been figured in previous reports. That now being used (and considered the best) is simple, strong, and efficient. It is reported upon very favorably from the proving ground, and will be supplied to the Atlanta and the other new ships. It is shown in the Appendix.

POWDER.

The brown prismatic powder furnished by Messrs. Du Pont & Co. having been quite successful in experimental practice with the 6 inch gun, the Bureau finally ordered 40,000 pounds, to be used chiefly for the outfit of the U. S. S. Boston, which vessel is advancing towards completion.

This powder has all passed the proof and been delivered.

Its performance was very satisfactory, and as far as time has enabled us to judge of the American brown powder, its keeping qualities are satisfactory.

Further time is, however, necessary to fully demonstrate this point.

The following are the best results obtained with brown powder in the 6-inch and 8 inch guns.

It will be observed that the muzzle velocities are high, while the chamber pressures are considerably below those which the guns were calculated to support in service:

Gun.	Powder.	Muzzle velocity.	Pressure.
		<i>Feet-seconds.</i>	<i>Tons.</i>
6-inch	American brown	2,105	15.0
8-inch	Westphalian brown	2,013	15.5

The powder for the different classes of Hotchkiss guns has all been developed, the specifications approved, and a supply sufficient for the outfit of the new steel cruisers has been obtained.

This is, of course, American powder; its action is perfectly satisfactory.

PROJECTILES.

Nearly all the cast-iron common shell for the use of the new steel cruisers have been cast and are largely completed. A few alterations were made in the nose of the latest patterns, to facilitate solid casting.

It must be remarked, however, that cast-iron is not a suitable metal for the manufacture of projectiles for use from high-power guns, as it has not the necessary strength and extensibility to support satisfactorily the shock of striking ordinary targets. Of course against armor-plates it would be useless.

For some years the Bureau has been trying to obtain from our steel makers some unhammered cast-steel common shell for use against unarmored ships. Several firms have presented castings, but none have thus far passed satisfactorily, being mostly porous or otherwise unsound.

Efforts will be continued in this direction, for, as before remarked, it is absolutely necessary to have a stronger metal to replace cast iron for common shells. There is but little doubt that the art of making solid steel castings will soon advance sufficiently to enable us to overcome the difficulties that have thus far presented themselves in this matter.

Within a couple of years very great progress has been made abroad in the manufacture of forged and tempered steel armor piercing shells, and several firms in France now make projectiles which when fired against steel plates with considerable velocity will either pass through without appreciable change of form or rebound with very slight deformation. Of course these results argue great perfection of manufacture, and great improvement over former results.

Some of the most important particulars of the improved manufacture abroad had already been worked out and adopted by this Bureau before being published in Europe; but for want of funds the Bureau has not been able to proceed with development beyond the point marked by last year's report. It is thought, however, that we shall be able to make a limited expenditure this year towards perfecting this most important branch of ordnance manufacture.

A cast-iron shrapnel has been perfected and tried with satisfactory results. It will be adopted for use until steel manufacturers can furnish a satisfactory steel shrapnel case.

A proposed cast-steel shrapnel is shown in the Appendix; but wrought steel tubing is really the proper thing from which to make shrapnel, and this matter is receiving the attention of the Bureau.

A satisfactory canister for the new guns has also been made, tried, and adopted for service. It is shown in the Appendix.

CARRIAGES.

The 8-inch barbette carriage of the Atlanta type has been proved for endurance at the Naval Ordnance Proving Ground.

It is shown to be convenient and amply strong.

The 8-inch sponson carriage for the Chicago is figured in the Appendix. The principal weight is borne by the circle next the pivot, and the center of gravity of the gun is placed vertically over that point, making this, in effect, a central pivot carriage; but a pair of rear trucks are added, which have the effect of lessening the pounding on the deck, and also lessening the tendency of the front clips to tear up the circle.

The gun does not take up any more room than when a short central pivot carriage is used.

A different form of elevator from those heretofore used is placed on this design. It is strong and simple, and as it brings the gun nearly to the position of "level" after each round, at the end of recoil, it allows the use of a reduced port if desired.

There are several different forms of this elevator, and they are shown in the Appendix.

A 6-inch carriage on the same general plan as that just described for the Chicago has been designed, and will be used on some of the ships about to be built.

The Bureau has heretofore been able to use unhammered cast steel forms only to a very limited degree in building gun-carriages, on account of the brittleness of the castings, which have a tendency to break up when exposed to the impact of small projectiles, such as those from Hotchkiss guns and the 3-inch howitzer. Several samples of cast-steel carriage brackets lately received have, however, shown excellent endurance under such fire, and it is greatly to be hoped that sufficiently ductile castings will soon be produced to answer for the different parts of carriages; if so, great advantage will result in point of simplicity and cost of manufacture. The specimen castings last furnished endured the fire of the Hotchkiss guns without cracking or breaking.

In some future designs of carriages it is proposed to use fluid pressure to elevate and depress the gun by means of a hydraulic cylinder; and it is proposed also to work the carriage by means of air or other elastic fluid (under pressure) carried in flasks or in other suitable receptacles placed upon the carriage itself.

A 10-inch carriage and loading apparatus, to be worked by hydraulic power, has been lately designed, and will be found figured in the Appendix. It is to be used in the proof of the 10-inch guns, and afterwards will be placed on board of the Miantonomoh.

MACHINE GUNS AND CANNON.

There have been no especially new developments in this direction lately. The effort abroad is constantly to increase the caliber of the

machine cannon, and it is thought that such pieces throwing projectiles of 20 and 30 pounds will be perfected soon.

The Bureau has given a great deal of attention to furthering the production of domestic ammunition for the Hotchkiss guns.

We have methods by which the best quality of armor-piercing projectiles for these guns can be made, and the Winchester Repeating Arms Company has succeeded in making solid drawn cartridge cases (for both the revolver and rapid-fire guns), which perform, if anything, better than those made abroad.

As the powder had been previously developed, it may be said that ammunition for this class of gun can now be made in the United States.

Two percussion fuzes proposed for projectiles of machine cannon are shown in the Appendix.

ARMAMENT OF THE NEW VESSELS.

For the new ships approaching completion, we have eighteen 6-inch and three 8-inch and two 5 inch guns finished, and three 6-inch and five 8 inch well advanced, together with all the carriages for the Atlanta and Boston, and all for the Chicago, except the 8-inch.

All the guns of the secondary batteries, and nearly all the small arms, have been provided, and all the electric search-lights and appendages. The mounts for the secondary batteries are being pressed; most of the powder of the Atlanta and Boston is delivered, and that for the Chicago will be ordered speedily.

The equipments of the unfinished ships are now in a forward state.

The South Boston Iron Works have virtually completed the six 6-inch guns which are to be assembled and finished there, and the two 8-inch guns are being pushed.

The West Point Foundry has made good progress on the guns that are to be finished there.

The contract of the Midvale Steel Works for 6-inch forgings is nearly filled, only a few remaining to be furnished.

ARMAMENT OF THE PROJECTED SHIPS AND OF THE MONITORS.

The sum of \$1,000,000 has been appropriated towards the commencement of the armament of the ships authorized to be built and completed at the last two sessions of Congress.

The designs for the guns of these vessels are virtually finished, and also those for all but the heaviest of the carriages.

Preparations are being made for receiving bids on the gun forgings.

ARMAMENT FOR CERTAIN SHIPS NOW IN SERVICE.

The third-rate modern ships last built are good sea-boats, have compound engines, and are in most important respects good examples of the best class of wooden vessels. They will last some years and must be depended upon to do most of the work of the Navy until a sufficient number of new ships are built to replace them.

It appears desirable that they should receive a modern armament, as the impression they produce without it is but slight.

When they are finally replaced the armament will answer for newer vessels.

There are eight of the class referred to, but the Bureau has submitted estimates for six, assuming that two may become unserviceable before their armament could be prepared.

The modern armament of these six vessels was also included in the estimates made last year.

PAPERS ACCOMPANYING THE
CLARK'S DEFLECTIVE TURRET.

It is thought that a 10-inch gun will be available for the test of the target soon.

As before remarked, two guns of this caliber are very well advanced, and if they endure the test called for by the act of Congress dated March 3, 1885, one can be used against the Clark target.

Projectiles for this purpose will be supplied in time.

NAVAL ORDNANCE PROVING GROUND.

This establishment has continued to do most excellent and necessary work for the Navy.

The guns for the new steel cruisers have been proved as completed; their range tables have been made, and the equipments designed for them have been tested.

Owing to lack of funds, the Bureau has not been able to make much advance in the development of armor-piercing projectiles, or shells intended for use with high explosives. It is hoped, however, this year that some money will be available for continuing these most important branches of work.

The powder for all the guns (main and secondary batteries) of the Atlanta and Boston has been proved and graded, and a good deal of powder and small-arm ammunition returned from ships has been proved.

Since December, 1885, the establishment has been in charge of Lieut. Austin M. Knight, U. S. N., whose administration has been very satisfactory to the Bureau.

NEW SITE FOR NAVAL ORDNANCE PROVING GROUND.

The present location of the proving ground is certainly unsuitable, and must become more so as the development of ordnance progresses. The range is entirely over water, and its use is embarrassed by the neighborhood of a light-house near the batteries and of a large hotel about half way down the range; besides, the number of oyster and fishing boats which are frequently anchored or moving about the range cause expensive delays in the practice.

An overwater range is not convenient, and all projectiles fired on it are lost. It is not possible to study much of the action and resistance of percussion and other fuzes on the farther parts of the range, and projectiles and the rotation bands cannot be examined after flight.

The defects of the present site are well set forth in the following extracts from a letter from the Inspector of Ordnance in charge:

* * * * *

I will refer again to the entire unsuitability of the position of the proving ground for the work now in hand and in immediate prospect. The oyster industry of Annapolis keeps the range crowded with small craft during eight months of the year, and weather most suitable for my work is precisely that which the oyster man needs in his calling. I am obliged either to drive these men from their fishing grounds, which is a great hardship to them, or wait until after their return in the evening, for an opportunity to fire, which entails extra expense to the Bureau, the work then being after the regular hour for closing has passed.

The frequent cases I have had of projectiles of smaller caliber leaving the battery leads me to anticipate much annoyance and even danger from this cause to Greenbury Point light house and to vessels at anchor in the roadstead. I have had frequent complaints from farmers in the neighborhood of fragments of projectiles passing dangerously near their habitations.

There have also been complaints from Horn Point of glass being broken and plaster knocked down from the violence of concussion at the discharge of the 6-inch

caliber. It is unnecessary to note that these effects will be much increased in work with the larger guns.

It is urgently recommended that a more suitable position may be purchased by the Department, in order that the needed experimental work and proof of guns may not be definitely interrupted.

TORPEDO TRIALS.

Trials with the Howell torpedo belonging to this Bureau were continued this year. They took place in the harbor of Michigan City, Ind., and were, as a whole, confirmatory of the favorable opinion before entertained regarding the principles embodied in this weapon.

Numerous runs were made, with speed greater than had been previously attained, and also with increased regularity of immersion, the accuracy of flight in the horizontal plane being, as usual, good.

The trials were not, however, conclusive; and it is understood that a company is engaged in further elaborating the weapon.

INSTRUCTION OF ENLISTED MEN.

This very important branch of instruction has been pursued by the Bureau both at the ordnance department of the Washington navy-yard and at the Torpedo Station, though the service has suffered somewhat at both places on account of our inability to detail an officer exclusively to conduct the instruction, owing to the inadequate number of officers on ordnance duty.

The course of instruction will be made to cover four months instead of six, the former period being considered sufficient for the present.

THE TORPEDO STATION

is now in charge of Commander C. F. Goodrich, U. S. N., he having very recently relieved Commander W. T. Sampson.

The stock of gun-cotton now on hand being nearly sufficient for present service needs, it is proposed to reduce the production very considerably, making only sufficient to supply expenditure and keep a proper reserve stock on hand.

The new boat-fittings for spar torpedoes have been issued to service, as also, in some instances, the cubical torpedo case, which allows a much closer stowage of the gun-cotton than before obtained.

The compact Le Clanché firing batteries, referred to last year, have been issued to all the ships that have fitted out since their completion.

New boilers have been supplied to the torpedo machine shop, and they also afford power for the gun-cotton factory.

Attention is again called to the importance of furnishing the station with two steam launches of modern form, engines, and speed, with which to exercise the torpedo class in the manœuvres which they will be expected to put in practice in time of war. The boats now at the station are old, slow, and worn out. They are useless for the purposes for which originally intended, and should be replaced.

An additional supply of fresh water should be furnished for use in the manufacture of gun-cotton, and an item has been inserted in the estimates for bringing this water in a pipe from the city of Newport to Goat Island.

An estimate has also been made for renewing the ferry landing stages both at the island and at the city of Newport. Those now in use are worn out and should be replaced.

The report of Commander C. F. Goodrich, Inspector of Ordnance, in charge of the Torpedo Station, is appended. It presents a view of the present condition and needs of the station, and contains excellent recommendations.

INSTRUCTION.

A class of twenty one commissioned officers and four gunners received instruction during the summer months in matters bearing on torpedo warfare.

Their interest in the subjects taught and their progress was gratifying, and the new course of instruction as marked out last year worked well.

It is very much desired to give thorough practice in the management of electric lighting circuits, and partly to this end the station will be lighted by electricity.

Those officers who took the long or special course acquitted themselves well.

A class of enlisted men has also received a course of instruction in torpedo warfare. This course was chiefly practical, and the progress made by the men was very gratifying. They showed intelligence and industry, and will, no doubt, be very valuable to the general service on account of their practical acquaintance with torpedo and electrical matters.

This instruction will continue and be a prominent feature.

Many of the officers and enlisted men became quite proficient in submarine diving (which is taught at the station), and the Bureau feels much gratified at the increasing interest which is being shown in this most important branch of seamen's training.

The report of the Board of Officers ordered to witness the examination of the torpedo class will be found in the Appendix. It will be observed that their opinion of the course and its efficiency is generally favorable; but they desire the amount of clerical work increased.

The Bureau has found by experience that any more writing than is done now is detrimental to the thoroughness of the practical instruction, which is the most important part of the course. The Board further recommends that the length of the course should be increased to seven months.

The Bureau does not concur in this recommendation; the general course has been shortened because it was found unnecessarily long, and, furthermore, it is impracticable, without the greatest inconvenience in the present state of the service, to hold so large a body of officers (mostly taken temporarily from other duty) for so long a time as proposed by the Board.

There is already in operation a special or longer course for those who are qualified to take it.

On the west side of Goat Island (towards the bay), when gales prevail, the sea undermines the bank of the island in places, notwithstanding the presence of a partial protection of quarried rock, which is piled there as a breakwater. Additional rock should be placed there so as to extend and strengthen the protection, and as this is a matter of pressing importance an item has been placed in the estimates asking for a small sum with which to carry on the work.

The question having been again raised concerning the carrying of the sewage of the city of Newport in a pipe across the inner harbor through the breakwater on Goat Island to discharge outside of the island, I beg leave to call attention to the following extract from a report on this matter received last year from Commander W. T. Sampson, who was then Inspector of Ordnance in charge of the Torpedo Station.

The report shows that unless the discharge of the sewer is carried

considerable distance into the outer bay the result will be disastrous to the health of the Torpedo Station.

* * * * *

The clerical force of the Bureau has performed its duties with intelligence and zeal; but the present extensive elaboration of ordnance material, the largely increased appropriations for the armament of new ships, and the multifarious details in connection therewith, renders it physically impossible for the small number of clerks and one draughtsman now allowed to properly keep up with all the work of the Bureau, and the increase of two first-class clerks, one copyist, and one assistant draughtsman, asked for in the estimates, is urgently recommended.

The following statements are appended, viz:

- A.—Statement showing amount appropriated under each specific head of appropriation for the service of the Bureau of Ordnance during the year ending June 30, 1886, expenditures during the same period, and balance remaining on hand June 30, 1886, amounts expended for material and labor, and what balance will be required to meet outstanding obligations made during the year.
- B.—Statement of cost or estimated value of stores under the cognizance of the Bureau of Ordnance on hand at the several navy-yards July 1, 1885, of articles received and expended from July 1, 1885, to June 30, 1886, and of those remaining on hand July 1, 1886.
- C.—Statement of the number of days' labor and cost thereof from July 1, 1885, to June 30, 1886, at the respective navy-yards and stations, chargeable to the Bureau of Ordnance.
- D.—Amount expended during the fiscal year ending June 30, 1886, from the appropriations under the Bureau of Ordnance for civilians employed on clerical duty, or in any other capacity than as ordinary mechanics and workmen.
- E.—Statement of contracts entered into by the Bureau of Ordnance during the fiscal year ending June 30, 1886, with schedules of bids upon which the same were based.

I am, sir, your obedient servant,

MONTGOMERY SICARD,
Chief of Bureau.

Hon. W. C. WHITNEY,
Secretary of the Navy.

REPORT OF THE CHIEF OF THE BUREAU OF EQUIPMENT AND RECRUITING.

NAVY DEPARTMENT,
BUREAU OF EQUIPMENT AND RECRUITING,
Washington, D. C., October 1, 1886.

SIR: I have the honor to submit the following report of all operations under this Bureau for the fiscal year ending June 30, 1886, and to submit the inclosed estimates for the fiscal year ending June 30, 1888.

For the fiscal year ending June 30, 1886, the following amounts were appropriated under the several headings:

Equipment of vessels.....	\$800,000
Transportation and recruiting.....	30,000
Contingent	15,000
Civil establishment (Bureau Equipment and Recruiting).....	9,000
Training station (for boys), Coaster's Harbor Island.....	25,000

During the fiscal year 62 vessels were fitted for sea, wholly or partially, at the various yards, and furnished with stores requiring an expenditure of \$57,510.05 for labor, and for material the sum of \$326,359.14

aggregating a total of \$383,869.19 from the appropriation "Equipment of vessels."

The appropriations for this Bureau for the year have been found sufficient, and I am glad to be able to report that there are unexpended balances of considerable amount to turn back into the Treasury from "Equipment of vessels" and "Transportation and recruiting."

In the estimates for the year 1888 the Bureau submits an estimate for \$60,000 for needed improvements at Coaster's Harbor Island, to include payment for a small cottage built on the island by Mr. W. A. Whaley, under permission granted by Secretary Chandler. The amount to be paid Mr. Whaley should be determined by a board of officers after examining all bills paid by him.

COAL.

For the use of vessels on foreign and home service there were purchased 50,841 tons of coal, costing, including all expenses of handling and delivery, \$312,856.35. During the year the price of coal was found to be cheaper than the previous year, but the general system of contracting invited a large number of bidders the direct effect of which was to obtain coal at very low figures.

HEMP.

The needs of the service required the purchase of the following amounts of hemp:

	Quantity.	Value.
Manila hemp .....pounds..	282,357	\$24,580 19
Russian hemp .....tons..	76½	15,933 07
Total		40,513 26

ROPEWALK.

The following amount of cordage, with the cost of labor and material, was manufactured during the fiscal year:

174,241 pounds manila rope	\$23,341 41
162,747 pounds hemp rope.....	19,251 04
17,335 pounds wire rope.....	4,710 53
43,923 pounds small stuff	5,926 56
Total.....	53,229 54

The cost of material being slightly higher and labor being about the same the cost prices of making rope for the year varies a little from that reported last year, manila rope costing a fraction over 13 cents per pound and hemp a fraction over 11 cents. With all sizes made the rope manufactured by the Government at Boston contains more material and less tar, and is superior in strength and finish to any made by private establishments. It is therefore cheaper.

FORGE, ANCHOR, SMITH AND CHAIN SHOPS AND ROLLING-MILL AT WASHINGTON NAVY-YARD.

During the past fiscal year there has been manufactured in these shops the following:

ROLLING-MILL.

185,500 pounds chain-iron	\$7,447 51
164,985 pounds bar-iron	3,564 89
100,430 pounds plate-iron.....	3,027 20
7,380 pounds angle-iron.....	184 50
2 scrap furnaces rebuilt	682 53
Total cost	14,906 62

FORGE AND ANCHOR SHOPS.

13,262 pounds forgings	\$644 44
11 anchors (3,300 to 7,400 pounds)	7,315 67
Total cost	7,960 67

GALLEY SHOP.

3 No. 3 galleys	6,152 92
1 No. 4 galley	1,715 21
1 No. 5 galley	1,179 96
1 No. 6 galley	1,367 74
Repairs to galleys belonging to the following-named vessels: Wyandotte, Hartford, Minnesota, Saratoga, Jamestown, Albatross, Dolphin, St. Louis, Dale, Essex, Alliance, Juniata, Vermont, Brooklyn, and miscellaneous repairs, &c	2,407 13
Total cost	12,822 96

SMITH AND CHAIN SHOPS.

240 fathoms 2-inch chain	3,984 44
435 fathoms 1-inch chain	3,977 65
240 fathoms 1-inch chain	2,619 04
120 fathoms 1-inch chain	1,127 82
175 fathoms 1-inch chain	609 49
165 fathoms 1-inch chain	453 10
Other miscellaneous work	1,754 15
Total cost	14,525 69

TRAINING APPRENTICES FOR THE NAVY.

Coaster's Harbor Island.—The permanent headquarters of the training service is located at this point, and at present is under command of Capt. A. R. Yates, U. S. N., an accomplished and efficient officer. Under his direction a number of needed improvements at the station have been made during the fiscal year. There yet remains a considerable amount of work to be done to fit the station to our needs. To extend the sea walls, to dredge the channel, to build a hospital, to build a natatorium for the boys, and to extend the wharfing, that coal and other vessels may land stores at this station, the Bureau asks the sum of \$60,000. This amount will be sufficient to include the payment of Mr. W. A. Whaley for the cottage built by him on the island under authority granted by Secretary Chandler, and also to maintain the property in good condition during the year.

The health of the station has been fairly good during the year, but the Bureau has felt the need of a hospital for those patients whose care and treatment needed separation or more quiet than could be afforded in the sick bay of the stationary ship New Hampshire.

The apprentices are usually detained at this station about six months, and are taught arithmetic, geography, history, and writing, together with the primary duties of the young sailor, such as knotting and splicing, heaving the lead, the compass, reefing and furling sails, pulling in boats, great gun drill, artillery and infantry tactics. After this preliminary instruction, they are drafted into the cruising training ships, when they are sent abroad to learn the usages of sea life and the higher duties of the sailor.

The following affords an exhibit of the number of apprentices in the service June 30, 1886:

Number on board stationary and cruising training ships	665
Number on board cruising vessels of the general service	530
Total number in service	1,195

Those on board the cruising vessels of the general service are distributed as follows:

North Atlantic Station	180
South Atlantic Station	00
Pacific Station	100
European Station	00
Asiatic Station	112
Total	530

During the year the number of applicants reached 2,674; the number rejected for various causes, 1,773; leaving the number accepted 901. Of this number, 352 failed to report for enlistment after examination, so that the number actually received into the service was 549.

The same system of instruction as reported in my last report was continued through this year, with the same good result. During the year the training ships Portsmouth, Jamestown, and Saratoga, under command of Commander Silas W. Terry, made a cruise of several months' duration among the Windward Islands of the West Indies. The resulting benefit of this cruise to the apprentices was very marked, as shown by an inspection of the fleet after its return to Hampton Roads. The ships were found in the most creditable condition of cleanliness and efficiency, and the apprentices showed the effects of careful and attentive training.

TRAINING SHIPS.

The Bureau would again advert to the pressing need for two modern steam cruising training ships to take the place of the Portsmouth, Jamestown, and Saratoga. The constant repair to these old ships to keep them efficient obliges the loss of too much time each year in the training of apprentices. Again, the next development of the training service will be to train a force of firemen for the new high-powered ships now coming into use. Without modern steamers in our training service, this necessary part of training cannot be undertaken.

As it is no longer possible to improvise our defenses, more particularly the men needed for them, the importance of our training system must be apparent. The watermen of our seaports and the seamen of our merchant marine were our dependence in the late civil war, but the vast improvements which have taken place since that time in guns, torpedoes, electric attachments, motive power, &c., in the modern war ship have made special training a necessity. We must, therefore, look to our training system mainly to supply us with men fitted and trained to our necessities. In this view the Bureau would urgently recommend for your consideration the construction of two steam, composite, bark-rigged vessels of about 900 tons displacement, with modern type of machinery, and fitted with torpedo attachments, search lights, and lighted by electricity. It needs no argument to prove that for service in the modern war ship the primary education of our apprentices should begin in a ship of modern type.

SAIL-LOFTS.

There have been expended for material and labor in making sails, awnings, hammocks, clothes-bags, &c., at the various yards the following:

For material	\$58,800 00
For labor	50,059 83
Total cost	108,859 83

RIGGING-LOFTS.

There have been expended for material and labor in fitting rigging for vessels in service at the several yards the following:

For material.....	\$37,600 33
For labor.....	30,044 00
Total cost.....	67,644 33

PENSIONS.

The following table exhibits the pension cases submitted to the Bureau during the fiscal year, under the sixth section of the act of March 2, 1867, sections 4756 and 4757, Revised Statutes of the United States:

Pensions under the sixth section of the act of March 2, 1867, sections 4756-4757, Revised Statutes of the United States.

Nature of claim	Claims pending July 1, 1885	Claims filed during fiscal year ending June 30, 1886.	Claims allowed fiscal year 1885-'86.	Claims disallowed fiscal year 1885-'86.	Claims pending June 30, 1886.
For service of twenty years.....	21	50	20	3	49
For service of ten years.....	15	35	12	7	30
For renewal of pension.....	0	15	11	3	1
For increase of pension.....	0	8	5	1	2
For arrears of pension.....	1	0	0	1	0
For review of claim.....	0	1	0	1	0
	45	109	48	15	■

ENLISTED MEN.

On the 30th of June there were 8,123 men and apprentices in the service. The number allowed by law has not been exceeded during the year.

Men allowed.....	7,500
Men enlisted during the fiscal year at rendezvous.....	1,688
Men enlisted on board vessels.....	2,497
Discharges during the year.....	3,500
Desertions during the year.....	609
Deaths during the year.....	112
Honorably discharged and continuous-service men in the Navy, June 30.....	1,470
Men employed in Coast Survey.....	275
Men employed in Fish Commission.....	134
Men employed at Naval Academy (winter).....	94
Men employed at Naval Academy (summer).....	424
Cost of maintaining the men doing duty in the Coast Survey for the fiscal year.....	\$156,799 10
Cost of maintaining the men doing duty in the Fish Commission during the fiscal year.....	\$64,064 97
	220,864 07

The Bureau would renew the suggestion of last year touching the force employed at the Naval Academy, in the Coast Survey, and Fish Commission. The force for these services ought not to exceed 600 men, and should be independent of the 7,500 men allowed the Navy at present. Several times during the year the Bureau has been cramped for

men to fit out additional vessels needed for service, and to commission the Essex it was found necessary to compose her crew very largely of boys from the training ships.

During the year a class of about 40 men were trained in the use of tools, lathes, ordnance construction, fitting ammunition, &c., for the new artillery at the Washington yard, and in torpedo work, diving, search lights, &c., at Newport. Most of these men have been drafted into the service and have proved to be most desirable additions to the crews of our war vessels. Another class at each station are now undergoing similar instruction.

During the last session of Congress bills looking to the system of savings banks, homes on naval receiving-ships, and retirement after 30 years' service, for seamen, passed the Senate but failed of action in the House. The Bureau would urgently recommend these measures to the favorable consideration of the Secretary of the Navy for such action as may be deemed necessary at the coming session of Congress.

It is believed that the passage of these measures will do much to increase the morale of the Navy. To secure the future of men and to establish the certainty that they will be taken care of when too old to work, as these bills do, is regarded a matter of such vital importance to the best interests of the service that it cannot be too strongly commended.

One other measure of great importance to the apprentices, whose pay is so small, is the matter of their outfit on enlistment. This the Bureau would urgently recommend as a means to remove much of the cause of discontent now prevailing. Their outfit of clothing at present costs them quite four months' pay, and during this interval the apprentices enjoy no privilege of liberty nor any pocket money for personal use. It can be understood how discouraging this must be to a boy taken from home, placed under restrictions and discipline, but forbidden the freedom to amuse himself by a run on shore. Desertion too often follows, with theft of outfit, as a consequence of a system which, at first sight, appears a hardship to the boy. The Bureau would suggest this matter as one filled with vital concern to the apprentice system.

There is no authority of law for a commissioned officer of the Navy to administer the oath of allegiance to recruits on enlistment. Article 2, section 1342, Revised Statutes, gives such authority to commissioned officers of the Army. As there are no notaries public on board of our receiving or other vessels, nor at naval rendezvous, the binding particulars of an oath are not required of recruits. If section 1342, Revised Statutes, could be amended to include officers of the Navy all enlistments would be given the binding effect of oaths lawfully administered. The Bureau is much impressed with the need of this feature of enlistment, and would therefore urgently recommend it for your consideration.

The Bureau would respectfully invite your attention to the need of some uniform system relative to punishment of men for the minor offenses committed on board ship. Under the present system, as the law does not define the offenses to be punished, there is much vagueness and great latitude of action permitted, in conformity to the six or seven sections of article 24 for the better government of the Navy. Justice to the enlisted men of the Navy would suggest that all minor offenses committed by them be alphabetically classified from the conduct reports of the past five or six years, and a suitable punishment prescribed for each offense in accordance with the law. It would result in greater uniformity in the means of preserving discipline, and would secure to the men of the service similar punishments for similar offenses.

The Bureau holds this matter to be one of vital concern to the best interests of the service, as it will secure for the enlisted men a punishment for minor offenses prescribed by unbiased judges, and will tend to secure them against the effects of hasty judgment, as might occur now.

Very respectfully, your obedient servant,

W. S. SCHLEY,
Chief of Bureau.

Hon. WILLIAM C. WHITNEY,
Secretary of the Navy, Washington, D. C.

REPORT OF THE CHIEF OF THE BUREAU OF STEAM ENGINEERING.

NAVY DEPARTMENT,
BUREAU OF STEAM ENGINEERING,
Washington, November 10, 1886.

SIR: In obedience to your order of October 23, 1886, I have the honor to submit to the Department the annual report of this Bureau for the past year, together with the estimates for the fiscal year ending June 30, 1888.

APPROPRIATION, STEAM MACHINERY, 1886.

Amount appropriated for fiscal year ending June 30, 1886, act approved March 3, 1885	\$950,000 00
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EXPENDED TO NOVEMBER 10, 1886.

For labor in navy-yards and stations, in constructing new engines, boilers, and their dependencies; repairing old boilers, machinery, &c., and fitting vessels for sea service; preservation of tools; handling and preservation of materials, stores, &c	\$474,906 78
For purchase of materials, stores, machine-tools, freights, and incidental expenses	202,068 54
For payments on foreign stations, for repairs, materials, freights, and incidental expenses.....	63,313 45
Total	740,288 77
Less repayments by transfers in the adjustments of appropriations	3,978 99
Total expenditure.....	736,309 78
Balance on hand	213,690 22

OBLIGATIONS OF THE BUREAU TO BE PAID FROM THIS BALANCE.

Approved requisitions for material unfilled.....	\$1,055 24
Contracts for machine-tools, unfinished.....	51,802 50
Foreign bills, in course of adjustment.....	389 68
	53,247 42
Balance remaining to the credit of this appropriation.....	160,442 80

APPROPRIATIONS FOR STEEL CRUISERS.

Amount drawn out by Bureau of Steam Engineering for the machinery of the steel cruisers and dispatch boat from the appropriation of \$1,300,000, act approved March 3, 1883.....	\$386,748 00
Less repayment by transfer (December, 1885) to Bureau of Ordnance in the adjustment of this appropriation...	42,000 00
	344,748 00
Appropriated, act approved July 7, 1884, for steel cruisers' machinery.	620,000 00

Appropriated, act approved March 3, 1885 (deficiency), for completing new naval cruisers and dispatch boat (machinery).....	\$86,98
Total appropriated (machinery)	<u>1,051,73</u>

EXPENDED TO NOVEMBER 10, 1886.

On the Atlanta.

Payments made on contract	\$212,310 00
Payments for extras to contract	4,261 63
Payment for "civilian expert"	421 00
Payments for draughtsmen, writer, &c.....	2,672 05

Under Government possession.

At the Morgan Iron Works, New York:		
Payments for labor.....	\$30,084 86	
Payments for material	18,649 21	
		48,734 07
At the Delaware River Iron Works, Chester, Pa.:		
Payments for labor.....	86 04	
Payments for material	29 30	
		115 34
Total		<u>268,514 09</u>

On the Boston.

Payments made on contract	\$213,030 00
Payments for extras to contract	3,264 23
Payment for "Herreshoff" steam launch.....	2,221 67
Payment for "civilian expert".....	421 00
Payments for draughtsmen, writer, &c	1,945 50

Under Government possession.

At the Morgan Iron Works, New York:		
Payments for labor.....	\$510 20	
Payments for material	1,622 81	
		2,133 01
At the Delaware River Iron Works, Chester, Pa.:		
Payments for labor.....	24,786 69	
Payments for material	18,764 46	
		43,551 15
Total.....		<u>266,566 56</u>

On the Chicago.

Payments made on contract	\$206,420 00
Payments for extras to contract	3,690 21
Payment for "civilian expert"	589 50
Payments for draughtsmen, writer, &c	9,578 25

Under Government possession.

At the Morgan Iron Works, New York:		
Payments for labor	\$17,634 64	
Payments for material	6,238 21	
		23,872 85
At the Delaware River Iron Works, Chester, Pa.:		
Payments for labor.....	44,185 82	
Payments for material	51,221 87	
		95,407 69
Total.....		<u>332,558 50</u>

On the Dolphin.

Payments made on contract	\$122,760 00	
Payments for extras to contract	7,060 15	
Payments for "civilian expert"	2,430 12	
Payments for draughtsmen, writer, &c.	208 00	
Amount accepted by assignees of John Roach in full settlement and satisfaction of all claim (machinery)	8,966 66	
Total	141,424 93	
<hr/>		
Total expended on cruisers and dispatch boat	\$1,009,064 08	
Payment for stationery for office, Chester, Pa	43 83	
Total expended from this appropriation	1,009,107 91	
Balance on hand	42,623 66	

The principal part, if not all, of this balance (\$42,623.66) will be required in the completion of the machinery of the cruiser Chicago.

APPROPRIATION, MACHINERY, DOUBLE-TURRETED MONITORS.

Amount appropriated for engines and machinery for the double-turreted iron-clads, act approved March 3, 1883	\$1,000,000 00	
Expended to November 10, 1886, under contracts dated June 15, 1883:		
For the Puritan	\$431,479 17	
For the Terror	156,534 30	
For the Amphitrite	156,534 21	
Total	744,547 68	
The unexpended balance of this appropriation reappropriated and made available during the last half of the year ending June 30, 1885, under the appropriation Steam Machinery, 1885, act approved January 30, 1885	140,000 00	
	884,547 68	
Balance on hand	115,452 32	
The balances yet due under the contracts for the completion of the engines, &c., for these iron-clads are—		
On the Terror	\$52,178 02	
On the Amphitrite	52,178 11	
	104,356 13	
Balance standing to the credit of this appropriation	11,096 19	

This balance of \$11,096.19, however, will be required to pay for cost of steam trials and extras to contracts of the monitors Terror and Amphitrite.

GENERAL OPERATIONS OF THE BUREAU.

The following table will exhibit the character and cost, in labor and materials, of the work done under the cognizance of this Bureau for the fiscal year ending June 30, 1886, upon the machinery, boilers, &c., with outfits, stores, &c., of naval vessels, and the expenditures for maintenance, &c., at the several navy-yards and stations:

Name of vessel.	Engines, boilers, and machinery.	Stores and outfits.	Total.	
Adams	\$18,299 86	\$4,649 40	\$22,949 32	New boilers completed and repairs to engines.
Ajax	35	1,296 62	1,296 97	Care and preservation.
Alarm	776 56	.....	776 56	Do.
Alert	17 22	688 02	705 84	
Alliance	67,985 53	1,129 89	69,115 42	New boilers completed and repairs to engines.
Amphitrite	52,178 07	.....	52,178 07	Under contract for the machinery.
Atlanta	181 24	.....	181 24	
Bear	18 00	.....	18 00	
Boston	1,146 00	.....	1,146 00	

Name of vessel.	Engines, boilers, and machinery.	Stores and outfits.	Total.	
Brooklyn.....	\$3,509 42	\$6,207 01	\$9,716 43	Repairs to machinery.
Canandaigua.....	0 35	.....	0 35	Repairs incident to continuous service.
Catapa.....	1,741 83	97 20	1,839 03	Repairs incident to continuous service.
Chicago.....	329 55	.....	329 55	Repairs incident to continuous service.
Cohasset.....	533 07	.....	533 07	Repairs to and changes in engines and boilers.
Despatch.....	3,336 08	1,595 53	4,932 51	Repairs to machinery and boilers and work on new boilers.
Dolphin.....	1,889 12	2,975 44	4,864 56	Repairs incident to continuous service.
Enterprise.....	648 26	971 07	1,619 33	Repairs incident to continuous service.
Essex.....	56,811 63	.....	56,811 63	Repairs to machinery and boilers and work on new boilers.
Fortune.....	3,619 02	514 00	4,134 01	Repairs incident to continuous service.
Franklin.....	38 57	1,045 08	1,083 65	Repairs incident to continuous service.
Gales.....	6,470 04	3,631 08	10,101 02	Repairs incident to continuous service.
Hartford.....	4,610 36	3,857 53	8,467 89	Do.
Intrepid.....	759 24	.....	759 24	Care and preservation.
Iroquois.....	189 33	1,243 86	1,433 19	Repairs to steam-heating apparatus.
Jamestown.....	230 26	74 28	304 48	Care and preservation.
Jason.....	508 69	.....	508 69	Repairs incident to continuous service.
Junata.....	9,676 33	2,200 69	12,877 02	Repairs incident to continuous service.
Kearsarge.....	9,353 07	1,760 21	11,113 28	Repairs incident to continuous service.
Lancaster.....	3,648 86	8,036 18	11,724 84	Repairs incident to continuous service.
Leyden.....	1,657 14	.....	1,657 14	Repairs incident to continuous service.
Macon.....	64 89	956 31	1,020 70	Repairs incident to continuous service.
Mayflower.....	790 62	221 42	1,012 04	Repairs to boilers while in service.
Minantonomah.....	3,392 96	.....	3,392 96	Turret machinery.
Michigan.....	100 33	28 05	218 38	New cutter-boiler.
Minnesota.....	1,094 65	1,761 83	2,846 48	Care and preservation.
Mohican.....	276 01	1,431 33	1,607 34	Repairs incident to continuous service.
Monocacy.....	665 75	1,396 08	2,062 73	Care and preservation.
Monongahela.....	10 87	0 00	22 87	Do.
Montauk.....	538 60	.....	538 60	Repairs incident to continuous service.
Monterey.....	728 30	125 71	854 01	Care and preservation.
Nahant.....	597 80	.....	597 80	Do.
Nantucket.....	700 15	.....	700 15	Repairs incident to continuous service.
Nellie.....	62 06	74 88	137 66	Repairs incident to continuous service.
New Hampshire.....	8 02	116 90	124 92	Do.
Nipelo.....	699 08	932 40	1,632 47	Repairs incident to continuous service.
Nipsa.....	2,010 93	497 06	2,507 99	Do.
Omaha.....	4,359 74	2,642 83	7,002 57	Repairs incident to continuous service.
Ossipee.....	287 69	874 07	1,161 76	Repairs to boilers while in service.
Palos.....	6,944 40	1,091 39	8,035 83	Repairs to boilers while in service.
Pinta.....	117 75	870 65	988 40	Repairs incident to continuous service.
Pensacola.....	2,774 96	4,464 66	7,239 62	Repairs to steam-heating apparatus.
Phlox.....	430 23	.....	430 23	Repairs incident to continuous service.
Portsmouth.....	133 05	470 21	603 26	Repairs to steam-heating apparatus.
Pilgrim.....	11 75	.....	11 75	Repairs to boilers while in service.
Powhatan.....	4,092 95	2,377 04	7,370 69	Final payments on the contract for engines.
Puritan.....	35,376 87	.....	35,376 87	Repairs incident to continuous service.
Quinebang.....	1,831 22	2,140 11	3,471 33	Repairs to machinery while in service.
Ranger.....	4,940 73	2,240 46	7,181 19	New boilers put in, and extensive repairs to engines completed.
Rescue.....	.....	114 07	114 07	Repairs to boilers while in service.
Richmond.....	62,611 07	.....	62,611 07	Repairs to boilers while in service.
Rocket.....	68 56	110 12	178 68	Repairs to boilers while in service.
Shonandoah.....	28 48	1,754 76	1,783 24	Repairs to boilers while in service.
Snowdrop.....	4 50	.....	4 50	Repairs to boilers while in service.
Speedwell.....	2,272 89	235 11	2,507 50	Repairs to boilers while in service.
Standish.....	9 90	.....	9 90	Repairs to boilers while in service.
Swatara.....	16,221 46	5,508 46	23,729 92	Repairs to boilers while in service.
Tallapoosa.....	9,224 35	4,103 82	13,327 17	Repairs to boilers while in service.
Tennessee.....	10,751 38	8,049 53	18,800 91	Repairs to boilers while in service.
Thetis.....	340 51	.....	340 51	Repairs to boilers while in service.
Ticonderoga.....	143 30	.....	143 30	Repairs to boilers while in service.
Trenton.....	184 81	3,333 62	3,518 43	Repairs to boilers while in service.
Vandalia.....	60,857 46	6,340 40	67,197 86	Repairs to boilers while in service.
Vermont.....	272 86	439 33	711 69	Repairs to boilers while in service.
Wabash.....	697 47	497 88	1,195 35	Repairs to boilers while in service.
Wachusett.....	7 50	133 37	142 87	Repairs to boilers while in service.
Wyandotte.....	143 15	113 54	256 69	Repairs to boilers while in service.
Yantic.....	5,831 47	3,174 26	9,005 73	Repairs to boilers while in service.
Total.....	495,448 96	101,600 04	597,049 00	

Expenditures at navy-yards and stations not included in the amount expended on naval vessels.

Navy-yards.	Yard expenses.	Miscellaneous.	Total.
Portsmouth, N. H	\$18,308 86	\$6,103 42	\$24,411 78
Boston, Mass.	7,693 16	.....	7,693 16
Brooklyn, N. Y	31,498 12	48,282 73	79,780 85
League Island, Pa.	6,240 35	959 28	7,199 63
Washington, D. C	11,967 00	40,965 11	52,932 11
Norfolk, Va	41,300 86	4,446 96	45,747 82
Pensacola, Fla.	5,245 53	70 34	5,315 87
Mare Island, Cal	42,764 94	13,362 75	56,127 69
New London, Conn.	1,507 95	.....	1,507 95
Key West, Fla	1,836 40	1,910 82	3,746 72
Total	168,362 17	116,100 91	284,463 08

PRESENT CONDITION OF MACHINERY OF NAVAL VESSELS, WITH THE WORK REQUIRED ON EACH.

The following will show the present condition and the work required to be done to the machinery of naval vessels to fit them for efficient sea service, or to keep them on such duty during the next fiscal year according to latest reports, with an approximate estimate of the cost of the same :

- Adams* (3d rate).—In service. In good condition.
- Ajax* (iron-clad).—In good state of preservation. Would have to be repaired with new boilers for sea service. (\$40,000.)
- Alarm* (torpedo-ram).—Out of commission, New York navy-yard.
- Alert* (3d rate).—Out of commission, Mare Island navy-yard, undergoing repairs.
- Alliance* (3d rate).—In service. In good condition.
- Atlanta* (2d rate).—Subject to contract trial.
- Brooklyn* (2d rate).—In service. In good condition.
- Boston* (2d rate).—Subject to contract trial.
- Camanche* (iron-clad).—At Mare Island navy-yard. Well preserved. Could be made ready for sea service at small cost. (\$2,000.)
- Canonicus* (iron-clad).—At City Point, James River. Would have to be repaired with new boilers for sea service. (\$40,000.)
- Catalpa* (tug).—In service at New York navy-yard. Repairs incident to service, (\$1,500.)
- Catskill* (iron-clad).—At City Point, James River. Well preserved. Could be made ready for sea service at small cost. (\$2,000.)
- Cohasset* (tug).—In service at Newport, R. I. Repairs incident to service, \$1,500.
- Dolphin* (3d rate).—In service. In good condition.
- Despatch* (4th rate).—In service. In fair condition. Repairs incident to service, \$5,000.
- Enterprise* (3d rate).—Out of commission, New York navy-yard, undergoing repairs.
- Essex* (3d rate).—In service. In good condition.
- Fortune* (tug).—In service at Norfolk navy-yard. Repairs incident to service, \$1,500.
- Franklin* (1st rate).—In service as receiving-ship, Norfolk navy-yard. If fitted for sea service would require new boilers (on hand) to be put in and machinery thoroughly overhauled and repaired. (\$30,000.)
- Galena* (3d rate).—Undergoing repairs at Portsmouth, N. H., navy-yard, \$9,000. Will probably require during the next fiscal year new boilers. (\$65,000.)
- Hartford* (2d rate).—In service, but requires thorough overhauling and repair, with new boilers. (\$75,000.)
- Intrepid* (torpedo-ram).—At New York navy-yard. Designated alterations would cost \$15,000.
- Iroquois* (3d rate).—In service. In fair condition. Will require repairs incident to continuous sea service. (\$10,000.)
- Jason* (iron-clad).—At League Island navy-yard. Well preserved. Could be made ready for sea service at small cost. (\$2,000.)
- Juniata* (3d rate).—In service. In good condition.
- Kearsarge* (3d rate).—Has been ordered to return to the United States. Will require general overhauling and repair, with new boilers. (\$65,000.)

- Lancaster* (2d rate).—In service, but will shortly require general overhauling and repair, with new boilers. (\$75,000.)
- Lehigh* (iron-clad).—At City Point, James River. In fair state of preservation. Could be made ready for sea service at small cost. (\$3,000.)
- Leyden* (tug).—In service at Portsmouth, N. H., navy-yard. Repairs incident to service, \$1,500.
- Mahopac* (iron-clad).—At City Point, James River. In good state of preservation. Could be made ready for sea service at small cost. (\$3,000.)
- Manhattan* (iron-clad).—At City Point, James River. In good state of preservation. Could be made ready for sea service at small cost. (\$4,000.)
- Marion* (3d rate).—In service. In good condition. Repairs incident to service, \$2,000.
- Mayflower* (tug).—Laid up at Norfolk navy-yard. Requires general repairs. (\$10,000.)
- Michigan* (4th rate).—In service. In good condition. Repairs incident to service, \$3,000.
- Minnesota* (1st rate).—In service as gunnery training-ship. If ordered for regular sea service would require extensive repairs and new boilers. (\$75,000.)
- Mohican* (3d rate).—In service. In good condition.
- Monocacy* (3d rate).—In service. In fair condition. Repairs incident to service, \$5,000.
- Monongahela* (2d rate).—Used as store-ship at Coquimbo, Chili.
- Montauk* (iron-clad).—At League Island navy-yard. In good condition. Could be made ready for sea service at small cost. (\$2,000.)
- Monterey* (tug).—In service at Mare Island navy-yard. Repairs incident to service, \$1,500.
- Nahant* (iron-clad).—At League Island navy-yard. Well preserved. Could be made ready for sea service at small cost. (\$2,000.)
- Nantucket* (iron-clad).—At New York navy-yard. In good condition. Could be made ready for sea service at small cost. (\$2,000.)
- Nellie* (tug).—In service at Mare Island navy-yard. Repairs incident to service, \$500.
- New York* (1st rate).—Requires new machinery, and new boilers (on hand) to be erected on board the vessel. (\$60,000.)
- Nipsic* (3d rate).—Out of commission, New York navy-yard, undergoing general overhauling and repairs. (\$20,000.)
- Nina* (tug).—In service at New York navy-yard. Repairs incident to service, \$1,500.
- Omaha* (2d rate).—In service. In good condition. Repairs incident to service, \$5,000.
- Ossipee* (3d rate).—In service, but will shortly require general overhauling and repairs. (\$25,000.)
- Palos* (4th rate).—In service. Requires general overhauling and repairs, with new boilers. (\$28,000.)
- Pinta* (4th rate).—In service. In good condition. Repairs incident to service, \$5,000.
- Passaic* (iron-clad).—In service at the U. S. Naval Academy. Repairs incident to service, \$2,000.
- Pensacola* (2d rate).—In service. In good condition. Repairs incident to service, \$5,000.
- Quinnebaug* (3d rate).—In service. Requires thorough overhauling and repair, with new boilers. (\$75,000.)
- Ranger* (3d rate).—In service. In fair condition. Repairs incident to service, \$5,000.
- Rescue* (tug).—In service as fire-tug at Washington navy-yard. Repairs incident to service, \$500.
- Richmond* (2d rate).—Out of commission, New York navy-yard. General overhauling and repairs, with new boilers put in, nearly completed.
- Rocket* (tug).—In service at Boston navy-yard. Repairs incident to service, \$500.
- Shenandoah* (2d rate).—Out of commission, Mare Island navy-yard. Requires thorough overhauling and repair, and new boilers. (\$75,000.)
- Speedwell* (tug).—In service at Norfolk navy-yard. Repairs incident to service, \$1,500.
- Standish* (tug).—In service at United States Naval Academy. Repairs incident to service, \$500.
- Sucatará* (3d rate).—Out of commission, Portsmouth, N. H., navy-yard. Requires to be thoroughly overhauled and repaired and new boilers (on hand) put in. (\$20,000.)
- Tallapoosa* (4th rate).—In service; in good condition.
- Tennessee* (1st rate).—In service, but requires extensive repairs, with new boilers. (\$85,000.)
- Thetis* (4th rate).—In service; in good condition.
- Trenton* (2d rate).—Out of commission, Norfolk navy-yard, undergoing general overhauling and repairs to machinery and extensive repairs to boilers. (\$20,000.)
- Triana* (tug).—In service at New York navy-yard. Requires thorough overhauling and new boilers. (\$15,000.)
- Vandalia* (2d rate).—In service. In good condition.
- Wabash* (1st rate).—In service as receiving-ship at Boston navy-yard. If ordered for sea service would have to be thoroughly overhauled and repaired, with new boilers. (\$50,000.)

Wyandotte (iron-clad).—At City Point, James River. In good condition. Could be made ready for sea service at small cost. (\$1,000.)

Yantic (3d rate).—Undergoing repairs at Portsmouth, N. H., navy-yard. (\$8,000.)

DOUBLE-TURRETED MONITORS.

Amphitrite (3d rate).—Under contract with the Harlan and Hollingsworth Company, Wilmington, Del. Will require about two months to complete, with full force.

Montonomah (3d rate).—In good condition. At New York, receiving turret machinery.

Menadnock (3d rate).—Boilers completed and stored at the Mare Island navy-yard. An appropriation was passed by the last Congress (act approved August 3, 1886) for building the machinery for this iron-clad by contract.

Peritan (3d rate).—The machinery built under contract with Mr. John Roach, Delaware River Iron Works, Chester, Pa., completed and accepted. Vessel is at the League Island navy-yard.

Terror (3d rate).—Under contract with William Cramp & Sons, of Philadelphia, Pa. Will require about three months to complete, working full force.

NEW STEEL CRUISERS.

Chicago (1st rate).—Is being finished under Government possession at the Delaware River Iron Works, Chester, Pa. Will require about four months to complete, working full force.

OPERATIONS OF THE BUREAU.

In the year that has passed since the date of my last annual report, the Bureau has prepared, by your direction and in accordance with the recommendations of the report of the Board on Additional Vessels, three designs and specifications for the machinery of the ships appropriated for by the act approved March 3, 1885, and elaborated to the necessary detail the specifications of the designs brought from abroad.

This, with the ordinary professional work of the Bureau, has entailed arduous and constant labor on the civil and naval attachés of the Bureau. I desire to acknowledge my indebtedness to them for earnest and faithful exertions, which have not been limited to the ordinary working hours or days of the year.

These designs are now before the builders of the country, by whom they have been well received. I believe them to be fully abreast of the development the art of marine engineering has attained, and to contain possibilities of performance equal to that of any marine machinery that has yet been constructed.

To obtain the anticipated results from the machinery to be built from them, however, there is another important factor required, which will have to be supplied, and that is a fire-room force, drilled and educated in new methods, differing largely from those which have heretofore sufficed in our Navy practice.

The machinery with which we have been dealing hitherto, designed fourteen years or more ago, under the prevailing practice of the times, for the moderate combustion of slow-burning anthracite coal, satisfied the conditions when producing from 4 to 6 indicated horse-powers from each square foot of grate. That with which we have to deal in the future demands, for the record trials at least, a duty three or four times greater than this, and from fuel burned under the different conditions of forced draft. It is needless to say that for this the systems and methods now in vogue will not avail.

I am of the opinion that, in order to obtain maximum results with this machinery, it will be necessary to organize a special fire-room force, drilled and disciplined for the purpose, to be employed on the trials of the several ships for record of speed and horse-power.

A forced draft system has been applied to the boilers of the U. S. S. Alliance, which has fully met the expectations of the Bureau. The space occupied by the boilers has been reduced one-third. The attained horse-power is about 15 per cent. greater than under the original arrangement, and it is believed, with additional experience, this can be increased. The coal-bunker capacity is increased 18 per cent., and the ventilation of engine and fire room is much improved.

Machine tools of large capacity and modern design, selected with special reference to future work of the Bureau, have been purchased during the past year for the shops of the navy-yards in active operation. When these are set up the facilities for work in these shops will be greatly increased, particularly for that which will be required on the details of the heavier machinery now coming into the service.

NAVY-YARDS.

The Bureau would again call attention to and emphasize the recommendations contained in several of the previous reports of the Bureau as to the necessity for a new boiler-shop at the New York navy-yard.

The building now used there for a boiler-shop is entirely inadequate to the work required, and is so constructed that neither large work nor the tools to do the same economically and expeditiously can be accommodated.

The necessity for at once erecting a new boiler-shop at this yard, and supplying it with the requisite tools and appliances, has become the more imperative, now that the steam-engineering plant at the Washington navy yard, where, heretofore, the Bureau has preferred to have this class of work done, has been surrendered for ordnance purposes.

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ESTIMATES OF APPROPRIATIONS.

I have the honor to submit herewith the annual estimates of this Bureau for the fiscal year ending June 30, 1888.

CHAS. H. LORING,
Chief of Bureau.

Hon. WILLIAM C. WHITNEY,
Secretary of the Navy.

REPORT OF THE CHIEF OF THE BUREAU OF CONSTRUCTION AND REPAIR.

NAVY DEPARTMENT,
BUREAU OF CONSTRUCTION AND REPAIR,
Washington, D. C., November 10, 1886.

SIR: In obedience to the Department's instructions, I have the honor to submit my annual report for the fiscal year ended June 30, 1886, showing the work performed and the amounts expended, together with estimates of the amounts required for the purposes of the Bureau for the fiscal year ending June 30, 1888.

The estimates for the expenses of this Bureau, as given in the statement marked A, are in accordance with existing laws. The recommendation on this statement for increase of salary of the chief clerk of the Bureau is respectfully submitted to your favorable consideration.

The chief clerk, under the law, acts as Chief of the Bureau in the absence of that officer, and must be competent to take charge of the Bureau. His duties are arduous, and fully deserve the salary herein estimated (\$2,250), a rate of pay not more than is now paid to others in the Executive Departments who have to perform similar duties of equal responsibility.

An estimate is submitted for a chief draughtsman for this Bureau, this rating having been for some years allowed in the Bureau of Steam Engineering. Mr. William T. Powell, the head draughtsman of this Bureau, should be rated to that position. He is to day undoubtedly the best qualified ship's draughtsman in this country, and has for years held his present position and served the Government faithfully and well with small remuneration. The establishment of this rating and the appointment of Mr. Powell to the position would be a well-merited reward for faithful and efficient service in the past.

An estimate for four additional draughtsmen is also submitted. This Bureau is now allowed but three draughtsmen. For the proper prosecution of the work of designing new ships it is absolutely and indispensably necessary that the additional force asked for be allowed.

There is also submitted an estimate for a messenger, the business of the Bureau requiring this additional assistance. The present assistant messenger is an intelligent and capable man, whose long service in the Bureau has made him valuable. Should the messenger estimated for be allowed, the promotion of the present assistant messenger is contemplated.

The estimate in statement marked C is for the pay of clerks and writers at the several navy-yards, whose services are indispensable for the proper and systematic prosecution of the work which is to be done at the yards by the Bureau. Each and every clerk and writer has specific duties to perform, which are not affected by the quantity of work doing at the yard. The same number of blanks is to be filled, and the same number of reports has to be made and sent to the Bureau for its information, without regard to the quantity of work on hand.

The estimate marked B is for the general repair of vessels at navy-yards and on foreign stations; purchase of stores, materials, machinery, rights of patented articles, and tools of all kinds; preservation of materials and stores; and for the general care and protection of the Navy in the line of construction and repair.

The appropriation for last year under this estimate was much too small to permit of carrying on the repairs of vessels at home and abroad, and purchasing the necessary materials, during the entire fiscal year; consequently, work which was in progress was delayed for want of the necessary funds to complete it. This same difficulty will be experienced this year to a greater extent, as the appropriation was reduced even lower than that for 1884-'85. An additional appropriation of \$310,000 is absolutely necessary to carry on the work without interruption for the remainder of the fiscal year. Unless this additional amount is allowed, it is more than likely that work in all or most of the navy-yards will have to be nearly, if not entirely, suspended early in the spring, entailing a much greater expense in the end, in completing suspended work, than would have been incurred had sufficient funds been available to continue the work without interruption.

Appended hereto is a list of vessels which have been repaired at the different navy yards during the fiscal year 1885-'86; also a statement of expenditures under the different appropriations during that year.

Appended hereto, also, is a list of the contracts made by the Bureau during the past fiscal year for materials and supplies for the several navy-yards.

The steel cruisers *Atlanta* and *Boston* are at the navy-yard, Brooklyn, N. Y.; they have both been docked and their bottoms cleaned and painted, and, independent of the work which had to be done by the Government to fit them for sea, alterations and additions have been and are being made to them, as called for from time to time by the Advisory Board.

The *Chicago* is still at Chester, and the work on her is now being pushed rapidly towards completion.

The reports of Naval Constructor R. W. Steele, in charge of the work on the *Chicago*, at Chester, and of Assistant Naval Constructor John F. Hanscom, inspector on the *Chicago*, under the Naval Advisory Board, and of Naval Constructor S. H. Pook, in charge of the work on the *Boston* and the *Atlanta*, at the Brooklyn navy-yard, are appended. They clearly show the condition of the work on these vessels, and the amount required at that time to complete them. The appropriation of \$95,861 made under the act of July 26, 1886, will not be sufficient to complete the work on these vessels, and, in order that no delay in its prosecution may be occasioned by lack of funds, I have asked for an additional appropriation of \$56,000, which, it is expected, will complete the vessels, provided no further alterations nor extra work involving any considerable expenditure of money and time are recommended by the Advisory Board.

During the past year the *Powhatan*, a second-rate paddle-wheel steamer of 3,980 tons displacement, carrying fourteen guns, has been condemned as unfit for further use in the naval service. This vessel has seen long and valuable service. She was commenced at the navy-yard, Norfolk, Va., in 1847, and was launched in 1850. Her hull was designed by Chief Constructor Francis Grice, and her machinery by Engineer-in-Chief C. H. Haswell, and the vessel was built under the direct supervision of Naval Constructor Samuel T. Hartt.

The *Lackawanna*, now at the navy yard, Mare Island, California, while not yet condemned, cannot be repaired, as the work required to fit her for further cruising at sea will exceed the limit of the law; but by having her machinery removed, the berth-deck extended fore and aft, and a house built over her, she will make a suitable receiving-ship for the Mare Island navy-yard, to take the place of the old line-of-battle ship *Independence*, which is now so badly decayed as to require considerable repair each year to keep her in condition for service, and whose sanitary condition is bad in consequence of so much rotten wood being in her. The *Lackawanna* was commenced at the New York navy-yard in 1861, and was launched and fitted for sea in 1863. She is a second-rate, single-screw vessel of 2,220 tons displacement, and carries a battery of nine guns. She was designed by Chief Constructor John Lenthall, and built under the supervision of Naval Constructor B. F. Delano.

The *Wachusett* is a second-rate, single-screw vessel of 1,575 tons displacement, carrying seven guns. Under the act of August 5, 1882, she has been condemned as unfit for further service. This vessel was designed by Chief Constructor John Lenthall in 1861, and built in 1862 at the navy yard, Boston, Mass., under the direct supervision of Naval Constructor William L. Hanscom.

The *Pilgrim* is an iron tug, and was condemned under the act of Au-

gust 5, 1882. She was built by Pusey, Jones & Co., at Wilmington, Del., under contract.

The Tennessee, the only first-rate wooden vessel in active service, can, in my opinion, be kept in service but a few months longer. She is undoubtedly in very bad condition; her main wale-strakes are so badly decayed as to preclude their being recalked, and her lower-mast-heads are so badly decayed that it is not considered prudent to carry a press of sail upon them,

The Shenandoah, a second-rate vessel of 2,100 tons displacement, recently arrived at the Mare Island navy-yard. The report of the Board of Survey represents her condition to be such that under the act of August 5, 1882, she cannot be repaired, as the estimated amount required to repair the defects in the hull alone will exceed 26 per cent. of the cost of a new vessel of like size and material.

The naval list will then consist of the following named and rated vessels:

Name.	Rate.	Displacement.	Station or condition.
<i>Serviceable.</i>			
		<i>Tons.</i>	
Tennessee	First.....	4, 840	Flag-ship, North Atlantic Station.
Chicago.....	First.....	4, 500	Building at Chester.
Trenton.....	Second.....	3, 900	Repairing at Norfolk yard.
Lancaster.....	Second.....	3, 250	Flag-ship, South Atlantic Station.
Brooklyn.....	Second.....	3, 000	En route to Asiatic Station; flag-ship.
Pensacola.....	Second.....	3, 000	Flag-ship, European Station.
Boston.....	Second.....	3, 000	Completing at New York yard.
Atlanta.....	Second.....	3, 000	New York yard; in commission.
Hartford	Second.....	2, 900	Flag-ship, Pacific Station.
Richmond	Second.....	2, 700	Repairing at New York yard.
Omaha.....	Second.....	2, 400	Asiatic Station.
Vandalia.....	Second.....	2, 100	En route to Pacific Station.
Juniata.....	Third.....	1, 900	Pacific Station.
Ossipee.....	Third.....	1, 900	Asiatic Station.
Quinnebang.....	Third.....	1, 900	European Station.
Swatara.....	Third.....	1, 900	Repairing at Portsmouth, N. H.
Galena.....	Third.....	1, 900	Repairing at Portsmouth, N. H.; in commission.
Marion.....	Third.....	1, 900	Asiatic Station.
Mohican	Third.....	1, 900	Pacific Station.
Iroquois	Third.....	1, 575	Do.
Kearsarge	Third.....	1, 550	European Station; on her way home.
Dolphin	Third.....	1, 500	Norfolk yard; in commission.
Adams.....	Third.....	1, 375	Pacific Station.
Alliance	Third.....	1, 375	New York; in commission.
Essex.....	Third.....	1, 375	En route to China.
Enterprise.....	Third.....	1, 375	New York yard; repairing.
Nipsic.....	Third.....	1, 375	Do.
Monocacy.....	Third.....	1, 370	Asiatic Station.
Tallahpoosa.....	Third.....	1, 270	South Atlantic Station.
Alert	Third.....	1, 020	Mare Island yard; repairing.
Ranger.....	Third.....	1, 020	Do.
Yantic.....	Third.....	900	North Atlantic Station.
Michigan.....	Fourth.....	685	Lake Erie.
Palos.....	Fourth.....	420	Asiatic Station.
Pinta.....	Fourth.....	306	Pacific Station.
Despatch	Fourth.....	560	New York; special service.
Thetis.....	Fourth.....	1, 250	New York; fitting for surveying.
<i>Torpedo rams.</i>			
Intrepid	Fourth	1, 150	New York; hauled out for alterations; work suspended.
Alarm	Fourth	800	New York; in ordinary.
<i>Requiring extensive repairs.</i>			
Franklin.....	First	5, 170	Receiving-ship, Norfolk yard.
Wabash	First	4, 650	Receiving-ship, Boston yard.
Minnesota.....	First	4, 700	Receiving-ship for boys, New York.
New York.....	First	4, 527	On the stocks, New York; to be completed.

Name.	Rate.	Displacement.	Station or condition.
<i>Requiring more or less repairs.</i>			
		Tons.	
Ajax	Iron-clad ...	2, 100	City Point, James River.
Canonicus	Iron-clad ...	2, 100	Do.
Camanche	Iron-clad ...	1, 875	Mare Island navy-yard.
Catskill	Iron-clad ...	1, 875	City Point, James River.
Jason	Iron-clad ...	1, 875	League Island navy-yard.
Lehigh	Iron-clad ...	1, 875	City Point, James River.
Mahopac	Iron-clad ...	2, 100	Do.
Manhattan	Iron-clad ...	2, 100	Do.
Montauk	Iron-clad ...	1, 875	League Island navy-yard.
Nahant	Iron-clad ...	1, 875	Do.
Nantucket	Iron-clad ...	1, 875	New York navy-yard.
Passaic	Iron-clad ...	1, 875	Naval Academy.
Wyandotte	Iron-clad ...	2, 100	City Point, James River.
<i>Completion appropriated for.</i>			
Amphitrite	Iron-clad ...	3, 815	Wilmington, Harlan & Hollingsworth.
Miantonomoh	Iron-clad ...	3, 815	New York yard.
Monadnock	Iron-clad ...	3, 815	Mare Island yard.
Puritan	Iron-clad ...	6, 000	League Island yard.
Terror	Iron-clad ...	3, 815	Philadelphia, Cramp & Sons.
Catalpa	Tug.	191	Yard tug, New York.
Cohasset	Tug.	100	Newport, R. I.
Fortune	Tug.	306	Repairing at Norfolk.
Leyden	Tug.	306	Yard tug, Portsmouth, N. H.
Mayflower	Tug.	306	Laid up at Norfolk.
Monterey	Tug.	52	Yard tug, Mare Island.
Nellie	Tug.	.....	Mare Island.
Nina	Tug.	306	Special service, Torpedo Station.
Rescue	Tug.	111	Fire tug, Washington.
Rocket	Tug.	127	Yard tug, Boston.
Speedwell	Tug.	306	Yard tug, Norfolk.
Standish	Tug.	306	Naval Academy.
Triana	Tug.	306	Yard tug, New York.
<i>Wooden sailing vessels.</i>			
New Hampshire	Second.	4, 150	Receiving-ship, Newport.
Vermont	Second.	4, 150	Receiving-ship, New York.
<i>First class.</i>			
Constellation	Third.	1, 886	Practice ship, Naval Academy.
Constitution	Third.	2, 200	Portsmouth, N. H., receiving-ship.
Independence	Third.	3, 270	Receiving-ship, Mare Island.
Monongahela	Third.	2, 100	Store-ship, Pacific Station.
<i>Second class.</i>			
Portsmouth	Third.	1, 125	Apprentice training ship.
Jamestown	Third.	1, 150	Apprentice training ship.
Saratoga	Third.	1, 025	Do.
St. Louis	Third.	830	Receiving-ship, League Island.
St. Mary's	Third.	1, 025	Public Marine School, New York.
Dale	Third.	675	Receiving-ship, Washington.

The new vessels, completed, building, or authorized to be built, may be summed up as follows:

Name.	Displacement.	Guns— breech-load- ing rifles.		Speed.	Condition.
		No.	Inches.		
Amphitrite	3,815	4	10	12	Incomplete.
Monadnock	3,815	4	10	12	Do.
Terror	3,815	4	10	12	Do.
Atlantonomah	3,815	4	10	12	Do.
Puritan	6,000	4	10	12	Do.
Dolphin	1,500	1	6	15	Complete.
Boston	3,000	2	7	14	Armament incomplete.
Atlanta	3,000	2	7	14	Do.
Chicago	4,500	3	6	15	Incomplete.
Gunboat No. 1	1,700	6	8	18	Under advertisement.
Gunboat No. 2	870	4	6	12	Do.
Newark	4,000	12	0	18	Do.
Charleston	3,730	2	10	18	Do.
Baltimore	4,400	4	8	19	Do.
Armored cruiser	6,000	4	10	18	Not designed.
Armored battle ship	6,000	2	12	16	Do.
Pneumatic dynamite gun ship				20	Do.
Torpedo boat, first-class					Do.

To the above list of iron and steel vessels can be added the *Alert* and the *Ranger*, two iron-built, single-screw vessels of 1,020 tons displacement, carrying 4 guns each; the *Monocacy*, an iron-built, paddle-wheel, double-ender gunboat of 1,370 tons displacement, carrying 6 guns; the *Michigan*, an iron-built, paddle-wheel gunboat, of 685 tons displacement, carrying 4 guns; the *Alarm*, with a Mallory propeller, of 800 tons displacement, carrying 1 gun; the *Intrepid*, on the stocks at the New York yard, yet to be completed, an iron-built single-screw gunboat of 1,150 tons displacement, designed to carry 2 new VIII-inch B. L. guns with a secondary battery.

The remainder of the iron-built vessels now in the service consists of 13 river and harbor monitors with single screws, rated as fourth rates, 5 of which have a displacement of 2,100 tons each, and 8 of them 1,875 tons each. They were built without double bottoms, and with laminated armor on the sides, turrets, smoke-stacks, and ventilators, and are armed with old-fashioned guns. They could not be got ready for service without an expenditure of \$200,000 under this Bureau alone. The *Saugus*, another of this class of vessels, now laid up at the Washington navy-yard, has been condemned as unfit for further service.

Besides these there are 9 iron-built tugboats, two of which, the *Palos* and the *Pinta*, are classed in the Register as fourth rates, the former carrying 6 howitzers, and the latter 2 howitzers, as batteries.

Of the second rates, the *Trenton*, *Omaha*, and *Vandalia* can probably be continued in service ten years longer; the *Lancaster* and *Brooklyn* six years; the *Hartford*, *Richmond*, and *Pensacola*, five years.

Of the third rates, the *Mohican* can be continued in the service for ten years; the *Adams*, *Alliance*, *Essex*, *Enterprise*, *Tallapoosa*, *Yantic*, and *Nipsic*, for six years; the *Juniata*, *Ossipee*, *Quinnebaug*, *Swatara*, *Galena*, *Marion*, *Kearsarge*, and *Iroquois*, five years longer.

In my last annual report, attention was called to the condition of the *Saratoga*, the *Portsmouth*, and the *Jamestown*, wooden sailing-sloops

of war used as training ships, and recommendation was made for two composite built, single-screw, bark-rigged vessels, of fine models, about 800 tons displacement, and light sparred. Since then, under my orders, Naval Constructor S. H. Pook has prepared the model, plans, and specifications for such a class of vessels, and they could be commenced at once if an appropriation was made for them.

The necessities of the Naval Academy demand another vessel besides the Constellation, properly adapted for a school ship; the Jamestown was necessarily loaned to the Academy from the training squadron during the past summer. The Monongahela, now used as a store-ship in the Pacific, could be sent around, her berth deck extended, and the requisite fittings put in her, when, in my opinion, she would be all that could be desired to meet the present needs of the Naval Academy. This could be accomplished at very slight expense. This vessel's machinery and boilers were removed at the Mare Island navy-yard, and she was rigged as a bark; she is spoken of as having worked splendidly on her way down to Callao.

Congress having authorized the completion of the double-turreted monitors Puritan, Amphitrite, Monadnock, and Terror, a board, consisting of Naval Constructors George W. Much, Samuel H. Pook, William H. Varney, and Assistant Naval Constructor Lewis Nixon, was convened under the Department's order and general instructions from this Bureau dated August 21, 1886. This board was directed to examine into the present condition of each of these vessels, to prepare specifications and plans for their completion, and to make all the necessary calculations for additional weights yet to be placed on board, in order that the draught of water, corresponding displacement and free-board of each might be known before work should be commenced on them. The work was much simplified by the vessels being afloat. The Puritan has her machinery and boilers on board, complete in all respects; the Miantonomoh, sister ship of the others, has been tried at sea with all her weights, or corresponding weights, in position on board.

The board has completed its examination of these vessels, and the specifications for completing them are nearly finished. The largest amount of work remaining to be done by the board is the completion of the plans, which, as soon as they are received, will be forwarded for your information. The work of completing these vessels could then soon be commenced.

In the event of only one of the large vessels provided for under the act of August 3, 1886, being built at a navy-yard, I have to recommend that it be built at the Brooklyn yard, as that yard is now in condition to commerce any such vessel and carry on the work with some rapidity.

I respectfully call attention to the recommendations made in the last annual report of this Bureau, relative to the necessity for the Government putting its navy-yards in condition to meet any demand that might be made upon them in an emergency in the building of armored or unarmored ships of war.

The greatest necessity exists for having better docking facilities in all our navy-yards. This is rendered more important on account of the frequency with which the steel unsheathed vessels will require to be docked to clean and paint their bottoms. In the event of a foreign war this great deficiency would be seriously felt, perhaps more so than any other of our present wants. It is therefore worthy of grave consideration whether immediate steps should not be taken to place our navy-yards, in this respect, in the most thorough condition of effectiveness.

While other nations are increasing their docking facilities, which are greater in one of the English dock-yards than in all of ours combined, we are doing nothing but theorizing.

I am, sir, very respectfully, your obedient servant,

THEODORE D. WILSON,
Naval Constructor, United States Navy.

Hon. W. C. WHITNEY,
Secretary of the Navy.

REPORT OF THE CHIEF OF THE BUREAU OF PROVISIONS AND CLOTHING.

NAVY DEPARTMENT,
BUREAU OF PROVISIONS AND CLOTHING,
Washington, D. C., October 18, 1886.

SIR: Herewith I have the honor to submit a report of the operations of this Bureau for the fiscal year ending June 30, 1886, together with schedules of proposals received for furnishing supplies, statement of contracts made, and account of sales of condemned stores for same period (numbered 1 to 18, inclusive), also estimates of appropriations, under cognizance of this Bureau, for the fiscal year ending June 30, 1888 (marked A, B, C, and D).

SUPPLIES.

In its operations during the past year it has been the aim of this Bureau to exercise the strictest economy in the purchase and providing of supplies coming under its charge, and the result that has followed demonstrates that there has existed a large field for the introduction of more careful business methods in its administration. The largely excessive amounts of provisions, clothing, and other stores heretofore kept in store have been and are being gradually reduced to the proper needs of our naval establishment, and the expenses incident to cost of labor in care of same, and large losses from deterioration, are thereby correspondingly retrenched. Your action in this connection, favoring the covering into the Treasury of nearly one-third of a million dollars, surplus clothing and small-store funds, will practically remedy abuses made heretofore possible by the existence of excessive available funds.

In the necessary purchases of supplies during the year the Bureau's contracts will exhibit gratifying results in the general reduction of prices, accompanied in many instances with manifest improvement of quality of the stores obtained. The policy of supplying our vessels abroad by periodical shipments of supplies has been found in its operation to be quite satisfactory. Availing itself of the low-freight rates of certain seasons the Bureau has been able to furnish our ships with home products of superior quality, and at much less rates than purchases can be made abroad.

CLOTHING FACTORY.

The operations of the clothing factory at the navy-yard, New York, show most progressive results in the character of its products during the year. The economy of the present system of producing clothing for the Navy is so obvious that vessels of the Revenue Marine Service, as

well as foreign war vessels in our waters, have sought to avail themselves of its advantages in procuring uniforms for their crews. The establishment of the carefully devised uniform regulations, under date of July 1 last, which provides that there shall be kept at the clothing factory a standard sample, to be adhered to in the manufacture of articles prescribed by such order, makes it possible, for the first time in the history of our Navy, to uniform the officers and crew of a vessel in exact conformity with regulations.

INCREASE OF PAY CORPS.

The Bureau takes this means of calling your attention to the fact that it believes that greater efficiency and security in the receiving and care of public stores at the several navy-yards and stations may be attained by assigning the duties of receiver and assistant receivers to junior disbursing officers under the senior officers now in general charge of such stores. The duties of receiver are of such responsible character that it is obvious that a bonded officer should be the proper person to fill that office, in order to enable the Government to exact due accountability for the valuable property, for the receipt of which they are responsible. The annual pay of an assistant paymaster on such duty would exceed that of the receiver by so small an amount that the slight increase of expense would be more than compensated by the greater security that the change would effect. The limited small number of assistant paymasters now in the service are nearly all employed, so that to enable the Department to adopt the course herein recommended it would be necessary for Congress to increase that class of officers to the number of twenty-seven, or ten in addition to the present number. To this end the Bureau would suggest that doubtless there are many young men now graduated annually at the Naval Academy in excess of the vacancies for them in other corps, who, having inclination and adaptability for accountants' work, should be well fitted for appointment in the Pay Corps, and anxious to avail themselves of the opportunity to remain in a service for which they have been educated by the Government.

DISBURSING OFFICERS' BONDS.

In connection with the subject of disbursing officers' bonds the Bureau respectfully recommends the desirability of a modification of the laws governing the same, to the extent of authorizing the acceptance of corporate sureties when of such a character as to be of undoubted solvency. The inconvenience and embarrassment attending the securing of private sureties in the periodical renewal of bonds, is quite seriously felt by many disbursing officers, who, from causes, incident to frequent changes of duty and station, are deprived of opportunity of establishing in a community friendly or social relations of a duration sufficiently extended to warrant them in soliciting a favor which embodies the strongest test of friendship.

SALES OF EXCHANGE.

In the procurement of disbursing funds by pay officers abroad through the sale of drafts on the Department and its agent in London, during the past year, the gratifying fact is presented that the total sales netted a considerable premium, while heretofore the Government has, on the contrary, sustained average losses in such transactions. This result

has, in a great measure, been attained through increased care and vigilance exacted from disbursing officers. Seasonable shipments of coin by the Department to our ships stationed in localities where sales of exchange could not be advantageously effected has also aided in procuring the above result.

INSPECTIONS.

The Bureau would respectfully state that at the inspection of provisions and clothing at the navy-yard, New York, where almost all the stores under the cognizance of this Bureau are received and distributed, additional room is now required, owing to the dilapidated condition and necessary removal of the building used for the storage of beef and pork, and which now necessitates the storage of those articles in the cellar of the inspection building, which in many respects is not suitable.

In conclusion, the Bureau would respectfully suggest that the stationery now received at the navy-yard, New York; and which is distributed from there to the various Bureaus and yards, could be handled to more advantage at the inspection of provisions and clothing at the ordnance yard here. The facilities for printing blank forms, headings, &c., at the Government Printing Office before distribution would save much labor and loss of time. The nature of the duties performed by the inspector of provisions and clothing now stationed at that yard would amply permit of his attention to the receipt and distribution of all stationery, blank forms, pay-rolls, &c., used at the various yards and stations, including the Navy Department, and in the opinion of this Bureau would facilitate the much-to-be-desired result of greater uniformity in the forms of blanks used by the different Bureaus.

Very respectfully,

E. N. WHITEHOUSE,
Paymaster, U. S. Navy.

Hon. WILLIAM C. WHITNEY,
Secretary of the Navy.

REPORT OF THE CHIEF OF THE BUREAU OF MEDICINE
AND SURGERY.

NAVY DEPARTMENT,
BUREAU OF MEDICINE AND SURGERY,
November 1, 1886.

SIR: I have the honor to submit the report of this Bureau for the past year, together with estimates for the fiscal year ending June 30, 1888.

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The recommendation of the Fourth Auditor of the Treasury in his present report, "that some system of property accountability be instituted by which an audit of the accounts of officers in charge of public property may be had," has been anticipated by this office, and in the "Instructions for Medical Officers of the Navy," issued by your order at the beginning of the present fiscal year, such a system of accountability as to the smallest details is effectually established.

INSANE OF THE NAVY.

There were 68 patients belonging to the Navy treated in the Government Hospital for the Insane, in the District of Columbia, for the year ending September 30, 1886.

Remaining in hospital September 30, 1885.....	58
Admitted during the year ending September 30, 1886.....	10
	—
Total under treatment.....	68
Discharged during the year:	
Recovered	4
Improved.....	2
Died.....	2
	— 8
Remaining in hospital September 30, 1886:	
Officers	9
Enlisted men.....	51
	—
	60

There were also four enlisted men of the Navy under treatment in the Hospital for the Insane, Napa, Cal., during the past year.

NAVAL HOSPITAL FUND.

The condition of this fund is as follows, viz:

Balance on hand October 1, 1885.....	\$129,722 43
Transferred to the credit since October 1, 1885, by the Fourth Auditor...	67,709 78
Credit by appropriation for fiscal year 1886-'87.....	30,000 00
	—
Total	227,432 21
Expended since October 1, 1885.....	63,649 94
	—
Balance on hand October 1, 1886.....	163,782 27

NAVAL HOSPITALS.

I am compelled to repeat the request for increased appropriation for the purpose of performing work that is necessary for the preservation and repair of the several naval hospitals.

The station at Widow's Island has not yet been used to receive patients from infected vessels of the North Atlantic squadron, but is in good condition when needed.

Plans for a permanent building at that place have been prepared, and I have to recommend that a suitable appropriation of money be made to begin the work.

PENSION CASES.

More than two thousand letters relating to applications for pensions were received and answered during the past year, July, 1885, to July, 1886.

With all the efforts made to respond promptly to the calls of the Pension Office for information from our records, the Bureau is very much behindhand and likely to become more so.

The request for additional clerical force in this division of the office is repeated with increased urgency.

MEDICAL CORPS OF THE NAVY.

I have to invite your attention to the condition of the Medical Corps of the Navy. Its vacancies have not been filled for several years; resignations, deaths, and retirements having depleted it more rapidly

than candidates have been obtained. The Bureau has not been willing to lower the standard of requirements; and it is impossible, with the present inducements offered, to find young medical men possessing the necessary qualifications who are disposed to become medical officers of the Navy.

The Army Medical Department has qualified applicants far in excess of its needs, attracted by better pay, well-defined rank, and more satisfactory professional position.

Since 1870 more than thirty young medical officers have resigned (three of them to enter the Army corps), and I cannot too strongly recommend that prompt measures be taken to increase the advantages and improve the condition of this department.

MUSEUM OF HYGIENE.

The report of Medical Director Turner, in charge of Museum of Hygiene, shows that the collection of sanitary and hygienic appliances has been increased during the past year by donation and purchase until the present building is completely occupied. More room is required for the interesting exhibit and for the increasing library.

The necessity for a building for the objects of the museum is apparent to any observer, and it is respectfully urged that the attention of Congress be called to this condition of affairs. Other countries have established institutions of like character, and the progress of sanitation in the United States, as presented in this museum, is creditable alike to the originality of the presented inventions and the object sought to be attained. * * * There has not been a day without some call for information, either from plumbers, architects, medical men, or others interested in the means of preventing dangers to health.

The chemical, physical, and biological departments of the laboratory have been steadily engaged. Analyses have been made, both chemical and commercial, of various proprietary disinfectants; examinations of wood preservatives; oils, presented to the Bureau of Steam Engineering, for lubricating purposes; gas, air, and water analyses have been made, and tentative experiments have been conducted towards improving water analysis, as well as, to improving the methods of determining organic matter in the air.

In the physical department attempts have been made to define a standard by which to measure the relative viscosity of oils for lubricating purposes at determined temperatures, and also in colorimetry, as giving data for accurate measurements by instruments of precision.

Dr. Turner's report on recent advances in sanitary science will be published with the Bureau's report for the present year.

Mr. Glenn Brown has presented the results of the series of experiments on the important subjects of trap siphonage, &c., which he has been conducting for the past year at the Museum of Hygiene, in an interesting report, which will be soon published.

COLOR BLINDNESS.

Total number of persons examined for enlistment during the year, 10,913; 79 were rejected for color blindness or feeble color sense; 7.2+ per 1,000 examined.

In examinations for admission to the Naval Academy in the past four years, 8 candidates out of the 495 applicants (boys between the age of 14 and 18 years) have been rejected on account of defective color sense, or about 1 in 62.

GENERAL AGGREGATE—SICK.

The tabular statements of sick, &c., have been compiled from the reports of sick from the several naval stations within the United States, and from vessels on the home and foreign stations for the year ending December 31, 1885.

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SUMMARY.

Daily average number of sick	182.4
Daily average each case was under treatment.....	7.4
Admissions per thousand of mean strength	917.4
Invaliding per thousand of mean strength	81.4
Deaths per thousand of mean strength	5.4

This is an increase over the average mortality of the Navy, which has been 4.40 per 1,000 for the past 15 years.

Of the epidemic influences affecting the mortality of the force afloat during the year, the appearance of cholera upon the *Ossipee* and *Enterprise*, both vessels on duty on the Asiatic station, where the disease prevailed extensively, is to be noted. Of the total cases, 9 in number, 3 recovered and 6 died.

Yellow fever appeared upon 6 vessels—the *Galena*, with 5 cases and 1 death; the *Swatara*, with 1 case, which recovered. These vessels were attached to the North Atlantic Squadron. On board the *Lancaster*, South Atlantic Squadron, 2 cases occurred, and were transferred to hospital at Rio de Janeiro and died. On the Pacific station Surgeon William A. Corwin died on board the *Adams* soon after reaching Panama, where he contracted the disease. The *Lackawanna* had 6 cases, with 4 recoveries and 2 deaths. On board the *Shenandoah* there was 1 case, which was transferred to hospital at Callao and died. Of the total cases, 16 in number, there were 9 recoveries and 7 deaths.

Very respectfully, your obedient servant,

F. M. GUNNELL,
Surgeon-General, U. S. Navy.

Hon. W. O. WHITNEY,
Secretary of the Navy.

MARINE CORPS.

HEADQUARTERS UNITED STATES MARINE CORPS,
Washington, D. C., October 9, 1886.

SIR: I have the honor to submit herewith my annual report of the condition of the United States Marine Corps.

On October 1 there were 1,885 enlisted men in the corps, 989 of whom were on board ships in commission and 896 doing duty at the several shore stations.

During the past year there have been 698 enlistments, 96 re-enlistments, 11 enlistments from the Army, 399 discharges, 12 deaths, 392 desertions, and 8 enlisted men have been retired.

Two captains have been retired for physical disability, and 2 first and 2 second lieutenants have been promoted to fill the vacancies.

One officer is under suspension by sentence of a court-martial and one is on "sick-leave" upon the report of a board of medical survey.

There are now 80 officers upon the active list, to be further reduced to 75, in accordance with a recent law.

An urgent necessity exists for the expenditure of \$3,000 in repairs at the Mare Island barracks, to prevent a much greater cost hereafter. The original plans of these barracks, which were approved by the Navy Department, included four sets of quarters, of which only one has been built, viz, for the commanding officer, leaving the company officers to be quartered in the same building with the enlisted men. An appro-

priation of \$15,000 is needed to erect three sets of quarters in accordance with the original plans. I have directed these two items to be included in the estimates for the coming fiscal year. I have also included the item of \$1,000 for the purchase of tents and camp equipage, as set forth in my report of last year.

The building for the enlisted men at the navy-yard, Pensacola, Fla., authorized by Congress, is now in process of erection.

I regret to say that no appropriation was made by Congress for barracks and quarters at the Norfolk navy-yard, and that the same urgent necessity exists for them as has been so often reported by me.

Recruiting has been successfully carried on during the past year at the offices in New York and San Francisco and the several posts.

The result of the inspections of the different posts during the year has been satisfactory. The estimates for the support of the Corps for the coming fiscal year were forwarded to the Department September 30.

Very respectfully, your obedient servant,

C. G. McCawley,
Colonel Commandant.

Hon. W. O. Whitney,
Secretary of the Navy, Washington, D. C.

REPORT
OF
THE SECRETARY OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR,
Washington, November 1, 1886.

SIR: I have the honor to submit the following annual report of the operations of this Department for the fiscal year which ended June 30, 1886:

INDIAN AFFAIRS.

Full and detailed information as to the operations of the Indian Bureau in all of its branches, including reports from the various Indian Agencies, will be found in the accompanying report of the Commissioner of Indian Affairs, who presents an interesting résumé of the work for the past year, and who makes valuable suggestions for the improvement and conduct of this important branch of the public service.

There is at this time a state of general quiet among the Indians. During the year there has been practically no actual disturbance or serious alarm caused by any of them, except the Chiricahua Apaches. It is highly gratifying to report that out of an Indian population estimated at 260,000 souls less than one hundred have been engaged in open opposition and resistance to the authority and control of the Government.

There has been a steady though not rapid improvement in the moral, material, and intellectual condition of the mass of the Indian population during the past twelve months. They are more tractable; fewer crimes and depredations are charged against them; more of them than at any prior period are engaged in useful and profitable industries; more than ever before are located upon individual allotments of lands, tilling the soil and living in houses. More have laid aside the blanket for the dress of civilization. The average attendance of children in the schools is about 1,600 greater than heretofore, and many more of the parents are anxious for the education of their children.

The Cheyenne and Arapahoe Reservation in the Indian Territory furnishes a striking illustration of this improvement. During the year

1885, as I stated in my last annual report, these Indians were so restless and threatening as to require precautionary measures to prevent open hostilities. During the past year quiet and order have prevailed upon the reservation. There has been an increase of over 1,500 acres in cultivation; farms have been fenced by Indians, who have built for this purpose 100 miles of fencing. They have cut and put up for winter use more than 400 tons of hay; have hauled over 1,000,000 pounds of freight from the railroad to the agency; and have over 150 more of their children in schools. Nearly all of the "squaw men" on this reservation have become legally married to their Indian wives in conformity to the requirements of this Department.

There are other evidences of a different character showing that the work of Indian civilization is progressing under the present management of the Indian Bureau. The estimates presented for the Indian service for the ensuing year are \$422,386.20 less than those of last year, and \$1,719,176 less than those of the year previous. These things all considered show that the work of elevating the race is bearing fruit. While the Indians on their part are advancing, the Bureau is retiring by the reduction of its expenditures.

I wish I could say that the progress in this direction is sufficiently rapid to promise an early accomplishment of the policy of the Government in reference to our Indian population. That policy, as I understand it, is the incorporation of the Indian race into our political and social system as citizens. Before, however, this consummation, which will be the crowning glory of our Government, can be attained, there must be some radical changes in our Indian policy. The present system was, when adopted, admirably adapted to the then existing condition of the Indians, and is yet, so far as is required to keep in order and peace and the greatest practicable comfort a large mass of savage and semi-barbarous population, dependent upon the chase and the bounty of the Government for its subsistence. But this condition it is impossible to continue.

As I stated in my last report, the only alternative now presented to the American Indian race is speedy entrance into the pale of American civilization, or absolute extinction. In order to escape the latter and attain the former, three conditions of preparation are indispensable. The first is to get established in this race the idea and habitude of individual property-holding, thorough reliance upon its inviolability and a perfect sense of security in the enjoyment of its benefits. Second, an education of the entire mass of the youth of this race, embracing a thorough knowledge of the use of the English language in the daily affairs of life, arithmetic, and the mechanical arts among the males, and among the females the domestic arts in use with that sex. Third, a substitution of the universal operation of law among them in the enforcement of justice and the protection of person and property, and the punishment of crimes for the agencies of force and superstition.

In my last annual report I referred to some of the difficulties encountered by this Department in conducting the administration of Indian affairs through the methods and agencies provided by law for that purpose, and suggested the appointment of a commission of six men, three of them to be selected from the officers of the Army, whose duty it should be to visit each reservation and investigate and report to this Department the condition, conduct, circumstances, and needs of the Indians residing thereon. In the annual message of the Executive to Congress the passage of the law authorizing the appointment of this commission was strongly recommended. The select committee of the House of Representatives on Expenditures for the Indians, of which Hon. W. S. Holman was chairman, recommended the passage of the bill (H. R. 6973) "to provide for the appointment of a commission to inspect and report on the condition of Indians, Indian affairs, and for other purposes." By the provisions of this bill, the commission would be required to perform just such duties as were suggested for it in the annual report of the Department, and which were stated more particularly in the message of the Executive to Congress on this subject.

This bill has not yet become a law. I earnestly recommend its passage before the expiration of the present Congress. The Indian agents are occupied with the details of their respective agencies. The necessary preparation of the multiplicity of returns, reports, &c., required by laws and regulations for the proper accountability for public funds and supplies which pass into their hands, leave them little, if any, time to look after the important work of instructing the Indians in industrial pursuits, in aiding them by their farming operations to look to their own garners instead of the Government warehouse for support, and to carry on successfully the great work of the division of landed property among them. The salaries allowed Indian agents are too small to secure for such positions men of the broad views and great ability required to lay before the Department the best and most economical plans of procedure to insure the successful advancement of the Indians. It is believed that the saving which would result from the intelligent work of such a commission would many times exceed the amount required for its maintenance.

Notwithstanding the failure of this measure to go through the last session of Congress, the work of locating the Indians on lands in severalty has been and is now being pushed with commendable activity by the Commissioner of Indian Affairs. During the year about eight hundred Indians have received title, as prescribed by treaties, to allotments of land for individual occupancy. Quite a number have taken up homesteads on the public domain under the Indian homestead laws. A large number have been located who have not yet been furnished with a title to their selections.

Not as much has been done as might have been accomplished in securing the settlement of Indians upon freeholds, had the bill just re-

ferred to become a law during the last session of Congress. The Indians have seen the wide ranges of territory occupied or claimed by them gradually but surely narrowed to smaller limits, until their present reservations in many instances are barely sufficient to afford each member of the tribe an ordinary farm. They see that to resist much if any further will leave them without land and homeless. The desire for individual holding of land is growing. Some of the treaties limit the allotments to very small quantities, in some instances to 20 acres. Where the reservations are sufficient to allow them more, the Indians hesitate or decline to accept title to such small quantities. They realize that they must now, if ever, secure what they consider will be a sufficient quantity of land for themselves and their families, and they are, and have been for some time past, seeking to have the area of the individual allotments in many of such cases increased. This is notably the case with the Nez Percés on the Lapwai Reservation in Idaho, and Willamettes on the Grand Ronde Reservation, in Oregon. There are other instances.

The two mentioned have been repeatedly brought to the attention of Congress for necessary legislation. Many of the Indians, anticipating that their laudable endeavors and wishes would be appreciated and met by Congress, have gone ahead and selected farms of not exceeding 160 acres; but no evidence of title could be given them by the Department for the lands so selected, in view of the restrictive provisions of the treaties on the subject. If the wisdom of Congress does not soon devise some general law which shall regulate the allotment of lands in severalty to all of the Indians, or declines to pass the bill for the commission just referred to, the necessary legislation to meet the urgent demands of the service in special cases should no longer be delayed.

EDUCATION AND TRAINING OF INDIAN CHILDREN.

Impressed with the importance of such education of the Indian race as will enable them to speak the language of the country; as will improve their morals and social ideas; as will enable them to properly understand and appreciate the laws which regulate civilized society; and as will train them to habits of industry, and an understanding of the mysteries of useful employment, the estimates for educational purposes which have been presented for the Indian service for the ensuing year have been increased, whilst the amounts requested for support of the Indians have been largely reduced below those of the last and of the preceding years.

The industrial school near Salem, Oreg., and the Carlisle school are both in need of more land for the proper training of Indian pupils in agricultural industries. Congress was requested, at its last session, to authorize the purchase of 84.92 acres for the first-named school at the total cost of \$1,500, to be paid in labor to be performed by the Indian pupils attending said school; and the grant of authority, with the nec-

essary appropriation, was also requested for the purchase of 109 acres adjoining the Carlisle school, at a cost of \$18,000. These measures received the sanction of the Senate, but failed to become laws. The above-named schools are doing good work, and I hope that Congress will not withhold from them the means necessary for training the Indian children in farming industries, which, of all others, are best suited to their present circumstances.

The report of the superintendent of Indian schools, accompanying the report of the Commissioner of Indian Affairs, contains detailed information on the Indian educational work for the year, with statistics showing the number and kind of schools maintained, the number of children provided for, and the cost of conducting this branch of the service—a general summary of which only can be here given:

Kind of school.	Number of schools.	Capacity.	Average attendance.	Cost.
Day schools managed directly by the Indian Bureau.	87	2, 832	1, 930	\$50, 470 71
Day schools managed under contract with the Indian Bureau	12	580	338	6, 304 08
Boarding schools managed directly by the Indian Bureau	67	4, 600	3, 759	437, 469 90
Boarding schools managed under contracts with the Indian Bureau.....	40	2, 272	1, 753	182, 185 08
Industrial training schools provided for by special appropriation.....	8	1, 850	1, 746	301, 451 08
Total.....	214	12, 933	9, 528	967, 861 43

ADMINISTRATION OF LAW AND JUSTICE ON INDIAN RESERVATIONS.

Until the passage of the Indian appropriation act of March 3, 1885, the ninth section of which provides for the trial and punishment of certain specified crimes committed by Indians, there was no United States law for the judicial administration of justice and the punishment of crimes among the Indians of many of the reservations. The punishment for offenses against the customs and practices of the respective tribes and against the universal laws of humanity are largely regulated and controlled by the caprice or whim of the head chiefs or headmen. Some of the tribes have regularly organized courts of justice, as among the five civilized tribes, the Osages, and, in a certain measure, among some of the other tribes. The agents of the Government have been and are largely invested with arbitrary power for the local execution and administration of laws and regulations for the government of the Indians.

As a means of teaching the Indians the habits of self-government and of obedience to law, local tribunals, styled courts of Indian offenses, presided over by Indian judges, have been established upon many of the reservations, under Department regulations issued by my predecessor. These are reported by the Commissioner to be doing good work generally in aiding in the preservation of order and helping the progress of the Indians. He recommends that the establishment of these Indian

courts be sanctioned by a law, and that an appropriation be made to pay the Indian judges a small salary for their services. I deem the recommendation wise and important.

There has been no general enforcement of the provisions of the ninth section of the act of March 3, 1885, for the punishment of certain specified crimes when committed by Indians, because of the expense which would be entailed upon the Territories. It is reported that the county authorities of some of the Territories for that reason have neglected to prosecute Indians charged with most serious offenses, and such as are covered by the law referred to. A bill was prepared by this Department and presented to Congress at its last session for relieving the Territories of the burdens of such trials, and for extending the provisions of law over portions of the Indian Territory, the passage of which is urged by the Commissioner. It is hoped that this matter may receive the attention of Congress, and that the law may be so amended as to make it effective.

INDIAN FARMING AND MARKETS FOR INDIAN PRODUCTS.

The farming operations among the Indians have increased in extent during the year, but a season of drought, especially in the Northwest, has not only limited the yield but greatly discouraged many of the Indians who have realized very little from their farming endeavors. Another cause for discouragement in their farming operations is the difficulty which they have in finding convenient markets for the produce raised by them. There is little if any demand on their reservations for any surplus grain and other products of the soil, the result of their labor. They cannot be easily induced to engage in industrial pursuits unless their labor is made remunerative. During the fiscal years 1885 and 1886 the Indians, mainly the White Mountain band, located near Fort Apache, on the White Mountain Reservation, in Arizona, raised and sold to the Quartermaster's Department the following:

Articles.	Quantity.	Price per 100 pounds.	Amount.
	<i>Pounds.</i>		
Corn	127, 710	\$3 00	\$3, 831 30
Barley	74, 325	3 00	2, 229 75
Hay	1, 481, 901	95	14, 078 91
Total.....	.....	.....	20, 139 96

The Army appropriation act of July 5, 1884 (23 Stats., 109), contains a provision requiring that the purchase of supplies for the Army, except in cases of emergency, which must at once be reported to the Secretary of War for his approval, shall be made by contract, after public notice, &c. The Indians have not yet reached such condition of intelligence and business capacity as to enable them to engage in the competitions of such contracts, and they are practically cut out by this law

from disposing of their surplus produce to supply the military posts, which are usually their most convenient and accessible markets. I think that the law should be so modified as to allow the proper officers of the military posts on or near Indian reservations to purchase from the Indians, in open market, at fair and reasonable rates not exceeding the market prices in the localities, any grain, hay, or other produce they may have for sale and which may be required for the military service at said posts.

GRAZING ON INDIAN LANDS.

It has been held by the Attorney-General that no general power is conferred by any statute upon the executive branch of the Government for making, authorizing, or approving leases of any lands held by Indians for grazing purposes. It is not believed that the herding of stock upon Indian lands by white men will be conducive to the well-being of the Indians. Many of the tribes hold surplus lands, and these lands produce yearly a growth of grass which annually goes to waste. The Indians have learned the value of this product of their reservations, and many of them are desirous of turning it to some profitable account for their own benefit. Requests have been made to this Department by some of the tribes, through their agents, for the privilege of taking cattle from neighboring cattlemen to pasture on the surplus lands of their reservations, the Indians to herd and care for the cattle and to receive a fair compensation therefor.

I believe that the Indians on many of the reservations could successfully and profitably manage such business if allowed to do so. It should, however, be so restricted and regulated as to prevent white men from going upon the reservations, and so as not to retard or interfere with the development of the agricultural and other industrial pursuits of the Indians. The herds of the Indians, where there are any, should not be deprived of ample pasturage, nor their growth and increase interfered with by the over-stocking of the reservations. The Indian herders should be properly compensated out of the proceeds, and the balance should go to the benefit of the tribe. Individual freeholders on the reservations, who have more land than they can cultivate, might be also allowed to take small numbers of cattle for pasturage.

It is desirable that Congress should enact some law that shall specifically authorize the Indians to use the grass upon their lands in such manner as has been suggested. The produce of all pasturage or other products of Indian reservations, except those of the civilized tribes, not the result of the labor of the individual members of the tribe, are required by a clause in the deficiency act of March 3, 1883 (22 Stats., 590), to be covered into the Treasury for the benefit of such tribe, under such regulations as the Secretary of the Interior may prescribe. This Department interpreted the law as leaving such moneys subject to its requisition, and the regulations formulated on the subject were designed with that in view, but when submitted to the Secretary of the

Treasury he held that such moneys when covered into the Treasury could not be drawn therefrom without further legislation by Congress. Consequently, the moneys have been deposited from time to time in the Treasury in small sums, but the aggregate at this time is nearly \$40,000.

The Indians owning or occupying the reservations very naturally reason that they are justly entitled to the revenues received from the sources specified, and they do not understand why Congress has so legislated as to put such moneys beyond the power of this Department to apply them to their use and benefit. It is recommended that the law be so modified as to allow those funds to be used under the regulations of this Department to meet the proper necessities of the Indians to whose credit they are or may be placed.

RAILROADS THROUGH THE INDIAN TERRITORY.

The reorganized treaties made in 1866 between the United States and the five civilized tribes, embraced stipulations permitting railroads to be constructed through the territory of the respective nations. There was also at the same time legislation by Congress authorizing railroad companies, the Union Pacific Southern Branch Railroad Company, now known as the Missouri, Kansas and Texas Railroad Company, and the Atlantic and Pacific Railroad Company (14 Stats., 289-292), under certain conditions to complete their roads to the north and east boundaries, respectively, of the Indian Territory, with the right to extend them through that Territory when the Indian title to the land falling under the operation of the acts should be extinguished by the United States upon the voluntary cession thereof by the Indians.

The Indians have claimed that these treaties and the contemporaneous legislation, construed together, contemplated but a single trunk road from north to south through their lands, with a like construction of the single trunk road from east to west through their respective reservations. The Indians have generally resisted the granting of authority for the construction of railroads through their territory in excess of the number or in directions or between points which involve any variance from the treaties as they interpret them. The necessities of commerce, incident to the rapid growth of the Southwestern country, have demanded increased railroad facilities through the Indian Territory. The matter received the attention of Congress from time to time until 1884, when it was thoroughly discussed and considered, resulting in the passage, on July 4 of that year, of two acts granting right of way to two railroads, the Gulf, Colorado and Santa Fé Railroad Company and the Southern Kansas Railway Company, from that territory. In this action Congress asserted the right to make such grants without the consent of the Indians through whose territories such railroad companies were authorized to construct their roads upon the principle of right of eminent domain in the Federal Government over the Territory. Other grants of

such right of way have since been made where the construction of the roads has been shown to be demanded by the public exigencies.

These acts all contain provisions for securing to the Indians protection in their rights and compensation for property taken. The construction and operation of railroads through the Indian Territory proper and through Indian reservations have presented many embarrassing questions for the consideration and action of the Department in its management of Indian affairs. They introduce into the Indian country an element not easily controlled by this Department under existing laws and regulations.

The railroads, however, while serving the necessary purposes of commerce, bring the Indians into closer contact and communication with the intelligence, the general trade, and intercourse of the country, and they contribute largely to enhance the value of the Indian lands through which they pass. These results will aid in breaking down the natural aversion of the Indians to the division of their lands for individual holding and the sale of their surplus territory.

In my last annual report I invited attention to the status of the Denver and Rio Grande Railroad through the Southern Ute Reservation in Colorado, saying that this railroad "has already been constructed and the maps of definite location were approved under the act of June 8, 1872 (17 Stat., 339), by my predecessor, on January 15, 1884, specially reserving and leaving open for future consideration the question of compensation to the Indians for the right of way." Nothing further has been done on the subject. The railroad is operating its road, using and enjoying the land occupied as a right of way, &c., without having to pay a penny to the Indians as compensation therefor. A portion of the road runs through what is still the Southern Ute Reservation. It is no wonder that these Indians are restless and unsettled when such invasion and occupation of their lands is permitted without compensation or any sort of redress.

I also called attention to the case of the Utah Northern Railroad Company, whose road had been constructed through the Fort Hall Indian Reservation, in Idaho Territory, and whose maps of definite location for so much of the road as passes through and upon the reservation have not been approved. The road is in operation, using and occupying 2,126 acres of land within the reservation for right of way and station grounds without having made any compensation to the Indians therefor. This matter was brought to the attention of both houses of Congress by my predecessor, Mr. Secretary Teller (see Senate Ex. Doc. No. 6, Forty-eighth Congress, second session), who stated that—

It is not presumed by this Department that the law of Congress granting the right of way to the Utah and Northern Railway Company (act of March 3, 1873, 17 Stat., 619) was intended to authorize the construction of their road across the lands of these Indians without compensation therefor.

This matter was made the subject of a special Executive message to Congress on December 21, 1885, urging action thereon. No legislation has been had on the subject. Bills granting the right of way to other railroads already constructed through other Indian reservations have received consideration by Congress, but have not yet become laws, viz:

The Carson and Colorado River Railroad, through the Walker River Reservation, in Nevada.

The Jamestown and Northern Railroad, through the Devil's Lake Reservation, in Dakota Territory.

The Chicago, Milwaukee and Saint Paul Railroad, through the Lake Traverse (Sisseton) Reservation, in Dakota.

The Northern Pacific Railroad, through the Yakima Reservation, in Washington Territory.

I repeat from my last annual report that the unsettled condition of these matters is embarrassing to the Department and a hindrance to the peace, quiet, and progress of the Indians, as well as unjust to them, and it is hoped that Congress will take speedy and definite action regarding them.

OKLAHOMA.

Active operations have been conducted by the Department with the aid of the military under instructions from the Secretary of War for the removal of all persons found intruding with cattle or otherwise upon that unoccupied portion of the Indian Territory commonly known as the Oklahoma country, and I am pleased to be able to report that the measures adopted and work performed have been effective in practically clearing that country and keeping it clear of trespassers of all kinds, and in so completely obstructing all efforts and demands made for its unlawful invasion as to check all open and active movements of lawless combinations of persons organized for the forcible entry and settlement upon these lands dedicated by treaties to specific purposes. The reports received indicate that there is a general sentiment on the border and in the vicinity of the Territory to submit in a law-abiding spirit to the decision and policy of the Government, and await the action of Congress on the matter.

It was asserted during the latter part of 1884 and earlier part of 1885 that there were no cattle in the Oklahoma country. Most positive representations of the same character were made to me when I assumed charge of this Department. Soon after it was found that a large number of cattle were being grazed upon these lands. Means were at once set on foot for their removal, which was not, however, fully accomplished before the season was so far advanced that the driving of cattle long distances to grazing lands outside of the Territory would have caused great loss of property. As the cattlemen were not claiming any right to settlement on the lands, their immediate expulsion was not considered so necessary as to cause great destruction of the prop-

erty to be made. The operations for the removal of the cattle were conducted with these things in view.

SURPLUS LANDS IN THE INDIAN TERRITORY.

The Commissioner repeats his suggestions of last year that the Indians in the Indian Territory occupying lands west of 98° of longitude be removed to the surplus and more fertile lands east thereof, and thus fill up the unoccupied Oklahoma country, and that the lands vacated, together with the public land strip, be sold to actual settlers, and he recommends that Congress authorize the appointment of a commission to visit the Indians and ascertain their wishes in regard to the proposed removal.

NEGOTIATIONS WITH INDIANS.

The negotiations authorized by the act approved May 15, 1886, making appropriations for the Indian service, to be made with certain bands or tribes in Minnesota, Northern Dakota, and Montana, concerning their existing treaties and reservations, and with other Indians in Washington and Idaho Territories for their removal to certain designated reservations and cession of certain lands, have been entrusted to a commission appointed during July last, consisting of Hon. John V. Wright, of Tennessee; Bishop Henry B. Whipple, of Minnesota, and C. F. Larabee, of the Indian Office. This commission entered upon its duties under Department instructions of July 27, 1886, proceeding first to the reservations of the various bands of Chippewa of Minnesota, where it is yet engaged. It is hoped that the work of the commission will be satisfactory to all interests concerned, and be presented to the Department in time to be laid before Congress during the ensuing session for its ratifying action.

NORTHERN CHEYENNE INDIANS.

A tract of unsurveyed land adjoining the eastern border of the Crow Indian Reservation, in Montana Territory, was set apart by Executive order of November 26, 1884, as a reservation for these Northern Cheyenne Indians who were living in that locality on the Rosebud and Tongue Rivers. The Department has not succeeded in inducing all of the Indians to go upon the reservation made for them. The boundaries of this reservation embrace some tracts occupied and improved by white settlers, who have strongly protested against being imprisoned within the Indian reservation and subjected to the regulations governing the Indian country. Though the Indians claim the country in which they are now settled as their former home, they have been congregated in their present localities since 1877. A portion were on the war path; some surrendered and some were captured after the Custer massacre, and were located in 1882, where they now are, by the military who held

them as prisoners. Others went there from the Pine Ridge Sioux Agency, where they had been placed after breaking away from the Indian Territory. A resident agent is authorized and provided for them in the Indian appropriation act for the current fiscal year. Suitable lands in the vicinity are being surveyed for the purpose of locating the Indians upon Indian homesteads. Some additional funds beyond the usual annual appropriation will be necessary to establish them upon their farms with stock, agricultural implements, &c., and to give them a start.

COLUMBIA INDIAN RESERVATION.

By Executive order of May 1, 1886, the land embraced within the Columbia Reservation in Washington Territory, except the tracts occupied by and allotted to the Indians thereon, was restored to the public domain, subject to the limitations as to disposition thereof imposed by act approved July 4, 1884 (23 Stats., 79), ratifying the agreement made July 7, 1883, with Chief Moses and other Indians.

THE EASTERN BAND OF CHEROKEE INDIANS.

A very general desire seems to be manifested by the Eastern band of Cherokee Indians to remove to and unite with their brethren in the west. They are poor, without any annuities, and have been for a long time embarrassed and annoyed regarding the title and possession of the land upon which they reside. Under a recent decision of the Supreme Court of the United States they can have no share in either of the funds held by the United States in trust for the Cherokee Nation so long as they live out of the territory and beyond the jurisdiction of the Cherokee Nation.

Applications have been repeatedly urged upon this Department to furnish transportation and subsistence claimed under treaties for squads of these Indians who have been reported as ready to start for the Indian Territory, but there have been no funds which could be used for this purpose. By the eighth article of the New Echota treaty of December 29, 1835 (7 Stat., 482), the United States agreed to remove the Cherokees west. The price for transportation and subsistence was fixed at \$53.33, to be paid to each person who should remove himself. By section 4, act of July 29, 1848 (9 Stat., 264), the Secretary of the Treasury was required to set apart, at interest, a sum equal to \$53.33 for each individual who had not removed. Certain payments were authorized to be made out of this fund by act of March 3, 1875 (18 Stat., 447), and the balance was, by act of August 15, 1876, placed to the credit of the band at 5 per cent. interest, and the Secretary of the Interior was authorized to use so much of the principal as would, with the annual interest, make \$6,000, for agricultural implements and the educational benefit of these Indians. There remains at this time a balance of about \$30,000 to the credit of the fund.

I am informed that the question of removal to and the union of these Indians with the Cherokee Nation west has been and is the subject of consideration by the respective parties. The accomplishment of that result is greatly to be desired as a measure advantageous to the Indians and to the Government. The last census-roll shows their number to be about 3,000, the larger portion of them being located in the western part of North Carolina. The amount necessary, if calculated at \$53.33 each, would be \$159,990, but it is believed that the removal can be accomplished at a less sum. I respectfully recommend that authority of law be granted for using the balance of their fund, and that such additional sum be appropriated as will make the total amount of \$60,000 to be used for the transportation of these Indians to the Indian Territory, and their subsistence, &c., whenever their readmission to the nation shall be arranged for.

UMATILLA INDIANS.

A further effort is being made to secure the consent of the Indians on the Umatilla Reservation, in Oregon, to the provisions of the act of March 3, 1885, which provides for allotting a portion of the lands to the Indians, and for the survey and sale of the remainder for their benefit. One of the United States Indian inspectors and a special agent of the Indian Bureau have been sent to that agency by the Department for that purpose. A preliminary report just received from them contains the information that a majority of the adult male Indians upon the reservation have assented to and accepted the provisions of the law, and have signed a paper to that effect.

NAVAJO INDIAN RESERVATION.

A small tract of land, portions of three townships, lying south of the San Juan River, and forming a part of the Navajo Indian Reservation, in New Mexico, was restored to the public domain by executive order of May 17, 1884. White settlers moving upon these restored lands attempting in some instances to settle upon tracts occupied and improved by individual Indians, and obstructing access by the Indians with their flocks to the San Juan River for water, made it necessary to reinstate the land as a part of the reservation, which was done by executive order of April 24, 1886. This order has served to remove, in a measure, the cause for excitement and disturbance.

THE CREE INDIANS FROM BRITISH AMERICA.

In October, 1885, a band of one hundred and thirty-seven British Cree Indians crossed the international border line and located near the Fort Belknap Agency, Montana. They had evidently taken part in the hostilities which had just been suppressed in the British possessions. In the absence of any specific demand from the Dominion Government for the return of these Indians to Canada, no power existed in the execu-

live branch of the Government to send them over the line. Such subsistence supplies as were absolutely necessary to prevent starving have been furnished them from the War Department and the cost reimbursed to that Department from the appropriations made in act of March 3, 1885, to relieve distress among Indians not having treaty funds.

MISSION INDIANS IN CALIFORNIA.

Senate bill 53 was pending in Congress at its last session, providing for a commission to make a just and satisfactory settlement with the Mission Indians residing in the State of California, upon reservations to be secured to them as their own property. It passed the Senate, but did not become a law. The passage of this bill, or, what I think is better, the incorporation of its provisions into a bill creating a general commission on Indian matters, of which I have spoken before, is important. So serious have become the embarrassments to these Indians by encroachments of white settlers upon their lands that an inspector of the Indian Service, who recently inspected the affairs of that agency, strongly urged the use of the military force to clear the reservations at once of all white persons claiming lands within their limits.

ROUND VALLEY INDIAN RESERVATION.

The bill prepared in this Department and presented to Congress at its last session, providing for the allotment of lands to the Indians on the Round Valley Reservation in California, extinguishment of claims of settlers, and for sale of any surplus lands, passed the Senate, but failed to become a law. This reservation embraces an area of 102,118 acres. The Commissioner reports that ranchmen and others, claiming title to only about 1,080 acres within its limits, are occupying nine-tenths of the reservation, to the great detriment of the Indians thereon.

I concur with him that if the bill referred to, or some other measure for the protection of the interests of these Indians, does not soon become a law, it will eventually become necessary to abandon the reservation and turn the Indians loose upon the surrounding country. This is one of the difficulties of Indian matters which should be more intelligently presented for the action of the Executive and to Congress by the commission heretofore recommended. The Indians are well prepared to take lands in severalty, and Congress is urged to grant legislative authority therefor.

THE UTES.

The Ute Indians located on reservations in Northeastern Utah have made very little progress in peaceful and industrial ways; they have not manifested a desire for the education of their children, nor have they, as a tribe, made any commendable efforts or endeavors to engage in civilized pursuits. As reports that they were, to some extent, growing more restive and insubordinate were received from officers of this

Department during the past spring, it was deemed prudent to call upon the War Department to place a military force sufficiently near them to meet any emergency that might arise. Troops were promptly stationed on the reservation, and reports show that their presence has had the effect to bring about a more pacific feeling among them.

I made particular reference in my last annual report to the Southern Utes in Colorado, whose rugged, oblong, and very narrow reservation, any point of which can be reached in a few hours by trespassing stock of neighboring ranchmen, offered many embarrassments to their progress, and I then said that "it would be far better to locate them in the Indian Territory, or, if that cannot be done, to place them with their kindred in Utah Territory, where there is abundant good land now in state of reservation for them with other Indians." Later a delegation of them visited this city, accompanied by their agent, and represented it to be the desire of the bands that they be removed to land which they asked should be set apart for them in the southeastern part of Utah. The matter was under consideration by Congress at its last session, and a bill was passed by the Senate, but did not receive final action in the House.

With no new or better light on the subject, I had concluded to renew my recommendation for the removal of these Indians, but while engaged in the preparation of this report a letter was received from the Commissioner of Indian Affairs, then at that agency, and also a recent report from one of the Indian inspectors, from which it appears that the Indians are about equally divided on the question of their removal; one-half being bitterly opposed to it, and desiring to remain where they are and to take lands in severalty; the other half still favoring the removal to Southeastern Utah. The inspector reports results of farming operations which indicate some progress among them during the past year, and he also states that the removal of the hostile Apaches to Florida has had a very good and quieting effect upon these Indians.

With this information now before me, I deem it unadvisable that any action should be taken for the removal of these Indians from their reservation. On the other hand, I think that the present time, with the more favorable conditions reported, presents an opportunity, which should be seized upon, for locating as many of them as possible upon individual allotments, and measures looking thereto have been initiated.

HOSTILE APACHES.

The Chiricahua Apaches who in May, 1885, left the San Carlos Reservation, in Arizona, under the leadership of Geronimo, committing horrible cruelties and depredations upon the people of Arizona, New Mexico, and also of Mexico, continued on the war-path throughout the past fiscal year. They kept no small portion of our territory in a state of alarm and dread, retarding its development. The theater of their

movements was largely confined to the mountains of Mexico, where they were hotly and vigorously pursued by the United States troops.

In my last annual report I urged that the "less guilty of the rebellious Chiricahuas * * * should be removed during the coming winter to some place where they can be more securely guarded." Those of that band remaining upon the reservation, while not actively engaged with Geronimo, were suspected of furnishing aid and comfort to those who under his lead were committing depredations and deeds of violence and bloodshed.

Attention was called to the fact that an existing law (20 Stat., 313) forbids the removal of any Indians from New Mexico or Arizona to the Indian Territory. Congress took no action in the matter. The winter passed and the opening of spring found that section of the country still in a state of excitement from fear of the hostiles who were yet at large, marking their pathway with the blood of many victims. On March 29, 1886, the main portion of these hostiles appear to have surrendered to General Crook, but on the same night about thirty-five broke away again. Seventy-seven of them, counting men, women and children, were, however, securely held, and these were sent, in April last, to Fort Marion, Florida, for safe-keeping.

Later, in July, the military authorities became convinced that the removal of those Chiricahua and Warm Springs bands of Apaches remaining on the reservation to some other place where they could be more securely guarded, was desirable if not necessary to bring about the surrender or capture of Geronimo and his followers. Fort Marion, Florida, was reported to be the best place for the purpose, and thither they were removed in September last, under directions of the War Department.

While arrangements for this movement were in progress, General Miles, the military commander who had succeeded General Crook, finally secured the surrender of the remnant of the hostile band as prisoners of war, thirty-four, including Geronimo and Natchez, the hereditary chief, on the 4th of September last, and eleven, including Mangus, on October 19, 1886.

It was determined by the President, after a full consideration of all the facts when known attending the surrender of those engaged in active hostilities, to send the adult males, eighteen in number, to Fort Pickens, Florida, there to be kept in close custody until further orders. The captured women and children were sent to Fort Marion, making the total number of four hundred and seventy sent to the last named place.

Under arrangements made by this Department twenty-nine boys and eight girls, between the ages of twelve and twenty-two years, have been transferred to the Industrial Training School at Carlisle, Pa., under the management of Capt. R. H. Pratt, and measures are in progress for affording school facilities for the remainder of the children of school age.

THE FIVE CIVILIZED TRIBES.

The Commissioner discusses at considerable length the condition of the five civilized tribes of the Indian Territory; the Cherokees, Choctaws, Chickasaws, Creeks, and Seminoles, and sets forth the evil effects flowing from the holding of their land in common contrary to the general policy which is being pursued by the Government with other Indians. If these tribes can be induced to consent to such modification of their treaties and to reform their own laws, adopting the tenure of land prevailing in the States, and thus bring themselves more in harmony with the institutions of our country, their example would have great influence and would materially aid in the civilization of the whole Indian population.

It is shown by the agent's report that there is within the limits of the territory owned and occupied by the five civilized tribes a population aggregating 100,500 souls, composed of 64,000 native Indians, adopted whites, freedmen, &c., and 36,500 white people who are there as licensed traders, railroad men, laborers, claimants to Indian citizenship, cattlemen, intruders, thieves, loafers, gamblers, &c. Over this vast population, with the great property interests in which these people are or may be interested or involved inside or outside of the Territory, with several railroads already in operation, and others in course of construction through their country, there is no judicial tribunal having jurisdiction over questions involving the rights of property and other civil matters of dispute between an Indian and a white man, or in which both parties are white men, or persons having no recognized title to Indian citizenship. Though crimes committed by such parties may be tried in certain United States courts for designated districts in Arkansas, Kansas, and Texas, yet many flagrant violations of law and order go unpunished because of the expense and difficulties of attendance upon those courts.

These tribes are communities of considerable intelligence; their existing governments are as well administered as could be expected in view of the anomalous positions they occupy; they have temples of justice, seminaries and high schools, and common schools scattered over their reservations; they have asylums for the orphans, the blind, the crippled, the insane, and the indigent. The Cherokees, Creeks, and Choctaws spend yearly about \$200,000 for the education of their children, besides what is done among them by the various religious societies in that direction.

It is certainly of the greatest importance, and no less for the interest of the Indians themselves than for the people of the adjoining States, that this vast area of country should have extended over it, as early as may be practicable, the universal laws of the land, and its large population and immense property interests be brought under the influence and operation of those laws as administered by the judicial establishment of

our country, so that lawlessness may be punished and peace and good order preserved through and by the courts of justice, and not by the agency of the Executive Departments, aided by the military force of the Government. Existing treaties provide largely for such courts. (See 14 Stat., 759, 773, 789, 803.)

The agent estimates that there are on the reservations of the five civilized tribes as many as five thousand persons who are there as claimants, asserting the right of membership or citizenship in the respective tribes. This matter has been a fruitful source of correspondence and discussion between the authorities of these tribes and this Department.

The Indians, especially the Cherokees, have heretofore demanded the removal by the United States, in accordance with provisions of treaties of 1835 and 1866 (7 Stat., 478, and 14 Stat., 799), of many persons whose claims to tribal membership are denied by them and whom they hold as intruders. Under opinion of the Attorney-General of December 12, 1879, holding that—

The United States in executing such treaties are not bound to regard simply the Cherokee law and its construction by the council of the nation, but that any Department required to remove alleged intruders must determine for itself, under the general laws of the land, the existence and extent of the exigency upon which such requisition is founded—

the agent was instructed by the Indian Bureau on July 20, 1880, to investigate all cases presented to him by the Cherokee authorities for removal, wherein the parties named claimed citizenship, either by blood through the father or mother, or by virtue of adoption according to the laws and customs of the Cherokees, and, if satisfied that they have *prima facie* a just claim to citizenship, to permit such persons to remain in the Territory to await final action in their cases under such rules as may be adopted by the Department. Many persons whose claims were examined by the agent are now in that Territory under permits issued by him in accordance with those instructions.

In view of the recent decision of the Supreme Court in the case of the Eastern Band of Cherokees, elsewhere referred to in this report, I directed that the agent be instructed to issue no further permits which would entitle claimants to a tribal membership to remain in the Cherokee country until their claims should be determined by this Department. It has been found to be a difficult question to deal with those already there holding such permits, many of whom have built homes, made extensive improvements and have gathered around them considerable property interests.

If it can be so arranged with the consent of the Indians, or in such just manner as the wisdom of Congress may prescribe, that cases decided by the Indian tribunals may be appealed to the United States court for the Indian Territory when established, it would open the way to a speedy and just determination of these disputed cases, and relieve

this Department as well as the Indian tribes of much embarrassment in dealing with such questions. By this means also the rights and claims which are asserted by the Cherokee freedmen, the Delawares and Shawnees incorporated among the Cherokees, but denied them by the Cherokees, might find a way to final and judicial determination.

INCREASE OF SALARY FOR COMMISSIONER OF INDIAN AFFAIRS.

The office of Commissioner of Indian Affairs, with the great responsibilities and the peculiar nature of the duties imposed upon it by law for "the management, under the direction of the Secretary of the Interior, of all Indian affairs, and of all matters arising out of Indian relations," is one of the most trying and difficult positions in the public service, requiring constant and exacting labors and unremitting care and watchfulness. The salary of \$4,000 allowed by law is by no means commensurate with the requirements of the office, and I therefore recommend that it be increased to \$5,000 per annum, thus making it to correspond with the salaries allowed for other bureau officers of this Department, which it at least equals in importance.

FINANCIAL STATEMENT.

Salaries:

Appropriated	\$97,980 00
Expended.....	92,784 98
Balance.....	5,195 08

Statement of expenditures for the Indian service during the fiscal year ended June 30, 1886.

Balance remaining on hand June 30, 1885, of permanent funds appropriated in previous years for fulfillment of treaties and for miscellaneous objects, also of interest on trust funds, and proceeds of sales of Indian lands.....	\$1,450,622 93
Amount appropriated for the Indian service for the fiscal year ended June 30, 1886, by act of March 3, 1884	5,673,826 81
Amount accrued during said fiscal year on account of trust-fund interest and proceeds of Indian lands.....	726,325 38
Total amount available.....	7,850,775 12
Amount expended during the fiscal year ended June 30, 1886	\$5,809,133 47
Estimated amount required to pay indebtedness incurred prior to June 30, 1886.....	381,618 35
	6,190,751 82
Balance on hand June 30, 1886.....	1,660,023 30

Of this balance, the sum of, \$1,337,768.21 represents an aggregate of permanent funds for fulfillment of treaties, &c., and available for current fiscal year; the remainder, \$322,255.09, is subject to be carried to the surplus fund as required by law.

PUBLIC LANDS.

The area of public lands disposed of during the last fiscal year and the receipts from the same, as compiled from the report of the Commissioner of the General Land Office, are as follows:

CASH SALES.

	Acres.
Public sales	589.15
Private entries.....	632,221.36
Pre-emption entries.....	2,279,218.39
Timber and stone entries.....	50,693.62
Desert-land entries.....	754,688.99
Mineral-land entries (exclusive of 230.84 acres within the Ute Reservation)	22,980.37
Coal-land entries (exclusive of 1,181.66 acres within the Ute Reservation)	8,986.71
Town-site entries	960.00
Excesses on homestead and other entries.....	19,473.24
Abandoned military reservations	3,686.20
Commuted homesteads (sec. 230, R. S.), previously reported in original entries	720,415.72
Commuted homesteads (act June 15, 1880), previously reported in original entries	144,713.46
Final desert-land entries, previously reported in original entries.....	150,383.86
Total.....	4,789,016.07

MISCELLANEOUS.

	Acres.
Homestead entries (original)	9,145,135.76
Timber-culture entries (original)	5,391,309.38
Entries with military bounty-land warrants	28,016.05
Entries with agricultural-college scrip.....	159.18
Entries with private-land scrip (Supreme Court).....	1,319.92
Entries with Sioux half-breed scrip.....	552.00
Entries with Choctaw scrip	80.00
Entries with Chippewa half-breed scrip	80.09
Entries of lands for agricultural-college purposes	19,472.02
Donation entries.....	1,753.84
Railroad selections (not acted upon)	2,311,537.30
Wagon-road selections	440.00
State selections—school, internal improvements, swamp indemnity, &c.	318,613.70
Swamp selections (not acted upon)	1,201,535.83
Swamp selections (approved) previously reported	171,978.85
Railroad selections (approved) previously reported	100,823.02
Total.....	18,692,806.85

INDIAN LANDS.

Cherokee school lands.....	340.25
Miami lands	200.00
Omaha lands	14,429.26
Osage ceded lands.....	526.24
Osage trust and diminished-reserve lands	1,033,825.36

	Acres
Sioux lands.....	40,179.90
Ute lands.....	43,085.73
	<hr/>
Total.....	1,132,596.74
	<hr/>
Grand total.....	24,614,419.08
Deduct as previously reported—	
Commuted homesteads (sec. 230, R. S.).....	720,415.72
Commuted homesteads (act June 15, 1880).....	144,713.48
Desert land entries (final).....	150,388.88
Swamp selections (approved).....	171,978.85
Railroad selections (approved).....	100,823.08
	<hr/>
	1,288,319.91
	<hr/>
Total.....	23,326,099.75

Not included in the foregoing are 2,663,531.83 acres of final homestead entries, and 141,693.97 acres of final timber-culture entries, made during the year, the areas of which have been reported heretofore in the original entries of the respective classes.

In addition to the preceding the following entries were made:

Number of pre-emption filings.....	50,676
Number of soldiers' declaratory statements.....	2,391
Number of filings on Indian lands.....	6,772
Miscellaneous filings.....	2,621
	<hr/>
Total.....	62,460

These filings cover an area of 8,432,000 acres.

CASH RECEIPTS.

Cash sales.....	\$5,757,891 06
Homestead fees and commissions.....	986,873 62
Timber-culture fees and commissions.....	484,766 00
Military bounty-land-warrant locations.....	843 00
Fees on scrip locations.....	11 00
Pre-emption and other filings.....	148,375 25
Fees for reducing testimony to writing.....	435 78
Fees on donation claims.....	55 00
Fees on State selections.....	4,616 12
Fees on railroad selections.....	28,895 48
Fees on wagon-road selections.....	5 00
	<hr/>
Total receipts from public lands.....	7,412,767 31
Receipts from disposal of Indian lands.....	1,607,729 63
Fees for transcript of record furnished by General Land Office.....	10,587 40
	<hr/>
Total.....	9,031,084 34

SURVEYS.

The public surveys made during the year, as given in the report of the Commissioner of the General Land Office, embrace the following areas:

	Acres.
Surveys of public lands	1,929,686.82
Resurveys of public lands.....	313,481.96
Resurveys of Indian lands.....	59,207.89
Total acreage	2,302,376.67

The Commissioner's report upon the public surveys, though interesting, is a painful exhibit. It appears from this document that the available agricultural land in most of the public land States and Territories has been largely returned as surveyed, and the surveys paid for by the United States, but in many instances the reported surveys are so defective and erroneous as to be without merit and misleading; and that in other cases no actual surveys were made, but plats were manufactured upon the basis of fictitious field-notes.

The proportion of unsurveyed lands is reported substantially as follows in the States and Territories named: In Arizona, one-fifth; in California, seven-sixteenths; in Colorado, seven-eighths; in Dakota, one-half of the Territory; in Florida, five-sixths; in Idaho, one-fifth; Minnesota, four-fifths; Nevada, one-half; Montana, one-fourth; New Mexico, two-fifths; Oregon, two-thirds; Washington, one-half; Wyoming, three-fourths.

In California, Colorado, Minnesota, Oregon, Washington, and Wyoming the unsurveyed areas are generally mountainous or heavily timbered. In Florida the unsurveyed lands are principally in the vicinity of the everglades and in islands and keys on the coast. In Arizona, Colorado, Idaho, Nevada, New Mexico, and Wyoming the country is reported to be largely occupied by cattle ranches.

The Commissioner makes the statement, based upon the reports of surveyors-general, that in New Mexico, Arizona, Colorado, Montana, and Idaho the surveys, mostly returned under the deposit system, embracing the greater part of the agricultural and grazing portions of those sections, appear to have been projected without regard to the necessities of the country, and wholly beyond any immediate or prospective demand for legitimate purposes, and that the returns appear to have been made in large measure without regard to the existence of actual surveys in the field.

The surveyor-general of New Mexico recommends a resurvey of the great body of surveyed lands in that Territory. He also states that there are strong reasons for believing that considerable areas have been surveyed on paper and paid for by the Government without any survey in fact ever having been made.

In Louisiana, New Mexico, Utah, and Colorado the surveyor-general of each of these Territories respectively reports the absence of all marks

or monuments or other means of identifying the subdivisions of sections, or even the locality of boundaries. In Louisiana their absence is accounted for by the obliterations of time, inundations, fires, and other agencies, but in the other States and Territories named it is reported that in large part the surveys were not executed except on paper.

In the present condition of these surveys it is very difficult for the Government to prosecute successfully trespassers upon public lands and depredators upon timber, and almost impossible for settlers to identify the land they wish to enter.

Examinations of deposit surveys in Washington, Oregon, California, Wyoming, Arizona, Colorado, Utah, and Nebraska show them to be in numerous instances unreliable, defective, or fictitious—some of them based upon false field-notes; some in which no surveys were made, no lines run, no corners established; many in which the notes represent the chaining of impassable chasms and declivities where lines could only be established by triangulation; others where lines are reported as run that were not actually surveyed, as demonstrated by the absence of mark-bearing trees and gross errors in reported measurements; others in which the topography represented upon the plats was entirely out of correspondence with the features of the country, some streams being represented where none exist and others as flowing in the wrong direction; others through dense chaparral where no roadways had existed and where the inhabitants of the neighborhood had not seen a United States surveyor for several years. Obvious deductions from the statements of this report, which, so far as I can judge, are based upon a patient and faithful study of the reports of the subordinate agencies of the Bureau, are:

(1) There should be an inspection of all work returned as executed in the field preliminary to an official acceptance of the surveys and payment therefor.

(2) That the present extension of the public surveys over new territory is not largely required in the interest of legitimate settlement.

(3) That owing to extensive frauds committed in surveys under the deposit system, the resurvey of a considerable portion of several States and Territories is becoming a matter of urgent necessity.

(4) The enactment of a law making false and fraudulent returns of public surveys a penal offense, and providing also penalties for the wilful destruction or removal of surveying monuments.

CASH ENTRIES.

In my last annual report I had the honor to recommend an increase of the minimum price for sales of lands at private cash entry. Such an increase would tend to prevent the accumulation of large tracts in the hands of a few individuals, thus distributing the public lands more equally among the people and augmenting the receipts of the public Treasury. I now renew this recommendation.

MEXICAN LAND GRANTS.

I also had the honor to recommend the enactment of a law barring the presentation of claims founded on alleged Mexican land grants, after such time as Congress may determine, to the end that the incentive for the presentation of false claims may no longer exist, and that those which are *bona fide* may the more readily and speedily be adjudicated. I also renew this recommendation.

The Commissioner invites attention to the reports of the surveyors-general of New Mexico, Arizona, and California, in reference to private land claims. These officers concur in the general statement that many false and baseless claims have been imposed upon the Government, and that apparently, as a rule, the boundaries and extent of claims, even when resting on approved titles, have been expanded to include immense areas not embraced in the original concessions, exceeding in some instances by many times the quantity which, under the laws of Spain and Mexico, the executive authorities had power to grant. At the expiration of the last fiscal year there were seventy-seven unconfirmed claims from New Mexico pending before Congress which had previously been reported by surveyors-general, involving a claimed area of 4,876,637.79 acres. In two of these cases reports were called for from this Department by the Committee on Private Land Claims of the House of Representatives, viz, the Arroyo de San Lorenzo, No. 79, and San Clementi, No. 67. Reports of the Commissioner in these cases recommended their rejection.

Under general instructions from the Commissioner directing the surveyor-general to investigate claims hitherto recommended to Congress for confirmation, and report the result of such investigations for the information of Congress and this Department, the surveyor-general has reported his examination of 22 out of 77 pending claims. The claimed area embraced in these cases investigated aggregated 2,000,000 acres. The surveyor-general upon his re-examination recommends the rejection of the claims in 17 of the 22 cases, and recommends the confirmation of the remainder to an amount less than 200,000 acres out of the 2,000,000. His reports in 4 cases, to wit, Cañon de Pendernales, No. 113; Canada de Cochita, No. 135; Salvador Gonzales, No. 82; and Pacheco y Padilla, No. 98, were transmitted to Congress at its last session through this Department. In 9 of the cases not yet transmitted to Congress the surveyor-general reports that the claims should be rejected upon grounds of invalidity of title. He has also examined during the year and reported for transmittal to Congress 10 new claims, in 6 of which the reports are favorable to the claims; 1, a claim for 444.24 acres, is found valid for 8.82 acres; and in 3 rejection is recommended.

The supplemental and original reports before mentioned, which have not yet been transmitted to Congress, will be submitted in due course of the business of the General Land Office and of this Department, with

a statement in each case of the grounds upon which the recommendation of the surveyor-general is based. These results indicate that it would be policy to submit all previously reported claims to the test of a thorough examination by the Land Department before the final action of Congress. The Commissioner reports that such examinations do not appear to have been heretofore made, but the cases have been submitted for confirmation based solely upon the *ex parte* statement of interested parties and accompanied by preliminary surveys of claimed areas made wholly at the instance of such parties and without the consideration by officers of the Government of the correctness of the claimed boundaries.

Great complaint is constantly made that claims heretofore confirmed were fraudulent either in basis of alleged title or in the excessive quantities embraced in surveys after confirmation or before. The surveyor-general of California reports that he examined 11 cases during the past year in that State, where the claims were confirmed by the board of land commissioners, or by the courts on appeal, and found that in 6 of the 11 cases so examined confirmation was made and patents issued on spurious title papers, while in the other 5 cases patents were issued for more land than the claimants were entitled to. In these 11 cases alone he found that nearly 440,000 acres of the best land in the State had been fraudulently obtained from the Government. The weight to be attached to these reports depends a good deal upon the character and skill of the surveyor-general, but the concurrence of so many, without any preconcert or consultation, would seem to be confirmation strong enough even for the charity that thinketh no evil. I do not regard the exhibit a favorable one to the settlement of private land claims by commissions or other special tribunals, in which the United States seems to be at the mercy of an *ex parte* presentation of the claims. Impressed with the importance of the subject, and appreciating the great need of speedy action, I concur in the opinion expressed by the Commissioner and the surveyor-general of New Mexico, that no proposition to transfer jurisdiction from Congress and the executive department should be entertained. A moderate appropriation for the necessary investigations by the Department should be made by Congress.

DESERT LANDS.

A bill having for its object the modification of the desert-land laws, so as to render them less liable to abuse and of more utility in the honest acquirement of lands of the class to which they apply, would meet with my approval. Should it not be the pleasure of Congress to legislate with this end in view, then I renew the recommendation in my previous report for the repeal of the desert-land laws.

TIMBER CULTURE.

The repeal of the laws to encourage the planting and cultivation of *timber* was recommended by me in my former report. The acreage suc-

cessfully converted into timber land under these laws has been small, and out of all proportion to the number of entries thereunder. To the end that this avenue for the procurement of lands by lax methods or by fraud may no longer remain open, I renew my recommendation for their repeal.

PRESERVATION OF PUBLIC TIMBER.

The constantly enhancing value of the public timber and the rapid destruction which is going on demand careful consideration and immediate action by Congress. The bill now pending for the preservation of the natural-forest lands at the headwaters of navigable rivers is, in my view, opportune, and should it become a statute the public good would be advanced. With reference to the timber on public lands in general and as a measure for its preservation, in my last report I recommended to your consideration legislative action which would embrace the following suggestions:

(1) That as to the lands already surveyed, of which the plats have been filed, appraisers be appointed to examine the lands. All legal subdivisions, by sections and quarter-sections, more than the half of which are overgrown with timber, shall be selected and appraised at their full actual value, and return made of the lands so selected and appraised to the officers of the land-office, where the lands so selected shall be marked on the plats "timber land," with the appraised value thereof.

(2) That in all future surveys the surveyor shall, as a part of his official duty, so select, appraise, and return each survey, and mark upon the plats all timber land and the appraised value.

(3) That every fourth section described by number, one-half of which, or more than one-half of which, shall be marked "timber land" and appraised, shall (as to the quarter sections thereof so numbered) be permanently reserved from sale.

(4) The lands marked upon the plats as timber lands and appraised, except the reserved sections, shall only be sold at public auction to the highest bidder for cash (but in no event below the appraised value). The sales to be after full advertisement, and to be made on the order of the Secretary of the Interior as he may direct. Any lands not sold at any such auction shall be held subject to future sale in the same manner and subject to the same order.

(5) Until the appraisal shall be made and the plats marked, all entries made shall be required to establish that the land entered is not timber land as described herein.

The restriction of the sales to such lands as in the judgment of the Department shall be needed to supply present wants would prevent combinations for speculative operations and the concentration of these lands in the hands of capitalists.

By subjecting the lands to appraisement and public sale their true value will be obtained. When the real value is paid the interest of the purchaser will guard against waste. The permanent reservation of every fourth "timber" section will be some provision for the future.

If the matter submitted should meet the approval of Congress, provision should be made for an adequate fund to examine and appraise the surveyed lands.

In view of the vital necessity of husbanding the timber resources of the country for present and future needs, I again recommend timely legislation therefor.

TIMBER ACTS OF JUNE 3, 1878.

In accordance with the general policy for the enactment of judicious measures for forest preservation, I invite attention to the acts mentioned under the above caption. The first of these provides for felling and removing timber from mineral lands in Colorado, Nevada, New Mexico, Arizona, Utah, Wyoming, Dakota, Idaho, or Montana, for mining and domestic purposes. In my former report I recommended the modification of this act to such extent as should provide for the *sale* of timber on mineral lands, for the uses therein enumerated, with proper provision for designating the lands from which such timber is sold, and the reenactment of penalties for cutting timber on public lands except in accordance with the law. I now renew this recommendation, and call especial attention to the expediency of securing to the Government an equivalent for so valuable a privilege.

The second act provides for the sale of timber lands in California, Oregon, Nevada, and Washington Territory. A proper regard for the preservation of the live-oak and red-wood in California and Oregon prompted me to recommend also the repeal of the fifth section of this act so far as it applies to the States last mentioned. I now renew this recommendation.

RELINQUISHMENT ACT OF JUNE 22, 1874.

I suggested in my last report the desirability of the repeal of the above act. It is alleged that the purpose of this act which was to afford relief to settlers has been defeated, and has been made by railroad companies the means of exchanging their worthless lands for public lands that are valuable.

DEPOSIT FOR SURVEYS.

I recommended in my former report the repeal of all legislation authorizing the system of deposits for surveys, the credit of the deposits on purchase of lands thus surveyed, and the transfer of the certificates of deposit.

The practices that have obtained under this system are pernicious and do not subserve the best interests of actual settlers. The system shifts the responsibility from the office created by law to individuals whose self interest is often in conflict with public policy and the general good. I renew my recommendation for the repeal of these laws.

UNLAWFUL INCLOSURE OF THE PUBLIC LANDS.

The statement made in my last annual report that large bodies of land were unlawfully enclosed for private purposes by individuals and corporations engaged in what they call "growing livestock" and "ranching," has been verified by the reports of special agents from that time until now. As shown by the report of the Commissioner of the General Land Office, 375 unlawful inclosures, containing an area of some 6,410,000 acres have been brought to attention up to the present time. It is believed that this does not represent nearly the area illegally inclosed. Proceedings to compel removal have been brought involving 2,250,000 acres. Decrees have been obtained for removals from more than 1,000,000 acres. Cases embracing 3,750,000 acres are pending examination, and from a part of these fences are now being removed. The total area from which fences have been and are being removed, as shown by the report of the Commissioner, is 2,714,926 acres. Doubtless a better showing would have been made with reference to these enclosures if the Department had had the means of employing the number of agents necessary for the prosecution of the work.

When the vastness of the public domain in the Northwest is considered, the difficulties of speedily executing the policy of the law of Congress and the President's proclamation against a powerful combination of capitalists, who can, by delays and evasions and other well-known methods, defeat the ends of justice, will be appreciated. Take the Territory of Wyoming alone, for example. It contains 97,575 square miles, an area about equal to New England and New York together. Through this vast territory only two railroads run, the Union Pacific from twenty to thirty miles from the southern border, and a branch of the Chicago and Northwestern, running from the east into the Territory more than one hundred miles, and only available by going to Omaha, Nebraska. Consequently nearly all the travel over this vast territory in making investigations and in enforcing the law indicated, must be performed by teams. The investigations by this mode of travel must necessarily be slow in comparison with those where railroad facilities are afforded. This fairly illustrates some of the difficulties attending the prosecution of this work.

Another obstacle in the administration and enforcement of the law has been the large grant of lands that has been made in alternate sections to railroads along their lines. In Wyoming the railroads have parted with their titles to these alternate sections, and the purchasers

The Atlantic and Pacific, under the grant given them by Congress, claims the odd sections along the line of their road in this Territory for 50 miles on each side. Some of this land they have entered into contract to sell, and it has passed into the hands of another corporation, who use not only the land of the railroad but also the even sections belonging to the Government, for grazing purposes, and pay no taxes. It is to some extent a matter of doubt whether the prohibitory provisions of the law covers these cases, though I am of the opinion that it does. Should there be any doubt in the mind of Congress upon this point additional legislation will be needed.

The President's proclamation and the action of the agents of the Department have arrested the further appropriation of the public lands by these unlawful inclosures. They have also produced a more tolerant spirit towards actual settlers. Before this frequent reports of violence and intimidation by those maintaining unlawful fences against citizens desirous to enter homesteads came to the Department. Some of the agents now report that those having such fences have erected gates allowing ingress and egress to settlers who have gone upon lands within their inclosures, and have openly proclaimed that they have no desire to prevent settlement upon the public domain by actual settlers, and the right of way to the public lands is accorded to them. Whilst, however, it is claimed that many trespassers on notification have removed their fences, it is undeniably true that a larger number still maintain them, and will refuse to obey the law except under actual compulsion.

In order to obtain direct information on this subject I instructed the two inspectors appointed under the act of the last Congress to give it their special attention and to report to the Department directly. One was sent to the Territory of Wyoming and the other to the Territory of New Mexico. The result of their investigations within the limited time has furnished to the Department enlarged and more special information upon the subject. They report a number of inclosures and an area inclosed in these two Territories far beyond what I had been led to expect.

How the illegal occupation and possession of the public domain could have grown to such enormous proportions is beyond my comprehension.

In its social, moral, and political aspect, not less than in its economic results, the existence and growth of such lawless combinations resting upon unlawful inclosures of the public domain, and protected by the acquirement of titles, through devious or more openly fraudulent methods, to the controlling sources of water supply, constitute to-day a phenomenon of American life and a problem of political import that demand the intelligent attention and action of the Congress of the United States. When it was first represented that substantially the entire grazing country west of the one hundredth meridian had been fenced in by cattlemen, I could not give credence to the statement of such lawlessness and rapacity. But the testimony of the residents of the Territories, who have no motive for misrepresentation, corroborated by reports based on per-

sonal inspection of agents and surveyors now on record in the Department, establish the fact. Indeed, it is publicly announced, by the trespassers themselves, who not only acknowledge that they have unlawfully fenced in the public lands without any limit except their own pleasure and power, but they justify their action, and complain against the execution of the law as an oppressive and unjust hardship.

In order that the case of these trespassers, called "live-stock growers" in some of the Territories and "ranchmen" in others, who thus stand in open and avowed violation of the laws of the land and declare their intention to continue in their course as a necessity of the case, in defiance of the authority of the Government, may be fairly presented, I incorporate the following letter from one of the largest stock growers and a prominent representative of the ranching interests, addressed to an inspector of this Department:

SANTA FE, N. MEX., *October 16, 1886.*

DEAR SIR: I am in receipt of yours of the 15th instant. In replying I wish to occupy enough of your time to explain, so far as I am able, the fence business generally. I will present to you in as brief a form as possible a few facts touching the unlawful fencing of the public domain by ranchmen in this Territory, and the reasons why such fences were built and are still maintained.

Some years ago a large number of cattle companies were organized in the Western Territories, and very considerable amounts of foreign capital were invested in the ranching business. The largest of these companies had ranches in Montana and Wyoming.

Under a mistaken theory the stockholders and managers of these companies, as well as many individual owners of large herds of cattle, thought that greater security of property could be obtained and more economical management of their business secured by fencing in extensive areas of the public lands and running their cattle in such inclosures.

The mania for fence-building began in 1878 and culminated in 1881, when a vast number of inclosures of public lands, ranging from 10,000 to 2,000,000 of acres, existed all along the Rocky Mountain slope.

Every one engaged in the cattle business who could raise money enough had as large a pasture as he could build. The Government made no objection to such inclosures and a tacit understanding seemed to exist among ranchmen that all could build as many pastures as they saw fit, so they had the water rights in fee. As a matter of course, this state of things could not remain long without objections coming from some one.

The first objections came from ranchmen not able to build fences themselves. They found that their cattle were deprived of water and when the heavy winter storms came they drifted against some big pasture fence and died of hunger and cold.

The winters of 1881, 1882, and 1883 raised other objectors to fences, and this time the objections came from men who had built the fences. It was found by them that their cattle drifted before the terrific blizzards that sweep over the treeless plains and were driven against the south line of their fences, and not being able to go farther, froze to death by thousands. These men were taught what they should have known before, that in order for cattle to live during these fearful storms they must keep moving; that no animal could live a single night and stand still; that cattle would drift before the storm and keep alive, but when stopped by any obstruction would stand still and die rather than move against the storm. So the losses to the fence-builders and fence-owners became so great that in many cases they took their

fences down altogether, and in other instances their neighbors kindly cut them down for them. So it turned out that when public attention in the East was first called to fences, and the great noise and din was raised in the newspapers about it, the ranchmen themselves, as a general rule, were more strongly opposed to it than any one else.

When Congress passed the law prohibiting fencing the public domain, those against whom it was supposed to be directed were the most anxious to see it rigorously enforced.

Experience had taught the cattle-raiser of the plains that fences would not do; by that I mean that inclosures to hold range cattle were disastrous failures.

The cattle of the arid country must have an open range to live upon, unobstructed and free of any lines running east and west. They must have a chance to drift just as far as they can travel during the storm, which is sometimes 200 miles; otherwise they die. When the President issued his proclamation commanding that all fences should be taken down in obedience to the law referred to, there were but few left to be removed. Since that time substantially all of the fences of any magnitude inclosing public lands have been taken down by the owners or cut to pieces by others.

There are, however, some exceptions, but upon examination it will be found that these exceptional inclosures are either in the South, where the winters are comparatively mild, or that the country inclosed is of such a character as to give cattle great natural protection in the way of timber, deep cañons, &c. Some such pastures exist, to which your attention has been called by others.

There seems to be a widespread misapprehension throughout the East in regard to this matter of fencing. One would judge from the public prints and the acts of some of our public men that the cattlemen of the West were seizing upon and fencing in the whole public domain to the exclusion of settlers. How this impression got abroad, and why it still has lodgment in the minds of honest and fair public men, is a surprising fact.

The simple truth is, that so far as my acquaintance extends among the ranchmen, great and small, there is not a single individual who, if he had the right to do so, would inclose a pasture to herd his cattle in. I will go further and say, what you will find to be true upon investigation, that those who own land could not fence it if they wished to, as the fence would be sure to be cut; of course I speak of fencing on any large scale.

The question therefore of fencing in the public domain for private uses is a thing of the past. The Government need not give itself further trouble on this score. It can safely trust the cattlemen themselves to see that the public lands, so long as they remain in their present condition, are unobstructed and free to all.

In speaking thus of fencing I must state again that I refer to large pastures made for the purpose of keeping considerable herds of cattle in.

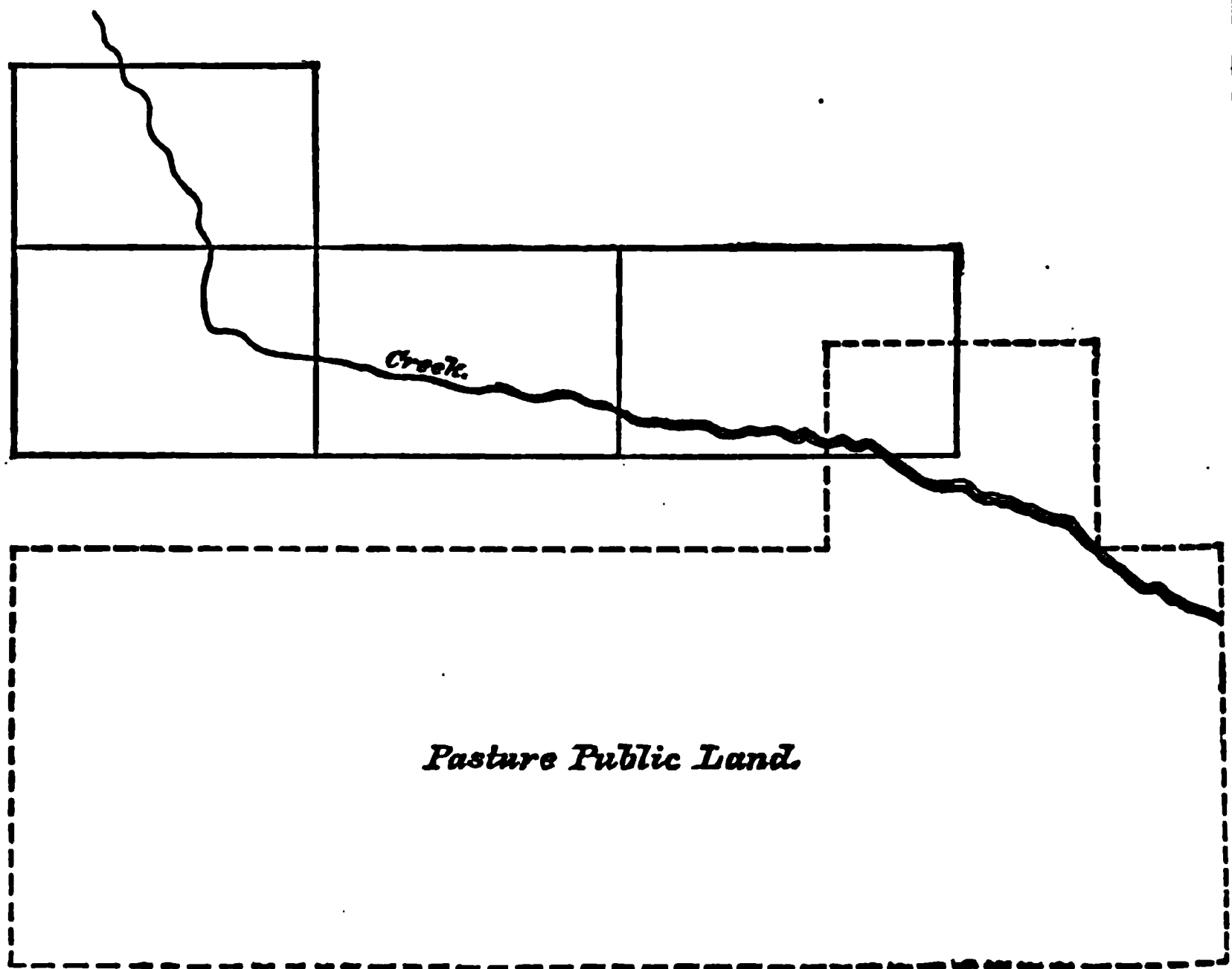
There is another class of fencing that does exist wherever there is a well-equipped ranch, and, it seems to me, must exist so long as ranching is profitably conducted. There are certain things essential to the successful conduct of the cattle-raising business.

The first and most important of these is the horse herd. To properly handle and look after 1,000 head of cattle a man should have twenty saddle horses and four team horses or mules. A ranchman owning 10,000 head of cattle requires about 200 head of saddle horses and 12 or 15 work horses. This large number of saddle horses are required for the reason that they are never fed anything except what they can pick up themselves on the plains. They therefore cannot be used every day. Each cow boy is given 8 horses to use during the summer. These horses are ridden in rotation. If the work is very hard and much fast riding to be done, he will change two or three times a day; oftener, however, the change is made only once a day. In addition to the number of horses taken upon the range by the men, a reserve is always kept on hand to take the place of those disabled or killed, as they frequently are.

For a ranchman to be without a good amount of saddle horses is like a skipper to be without sails to his vessel. The horses must always be kept well in hand and in good condition. To keep them in hand you must have pastures, and in building the pastures for this purpose you must necessarily trench more or less upon the public domain. If you do not occupy any of the public domain in such pastures, you do what is infinitely worse to the public interests—you inclose your own land, which covers water, and prevent your own cattle and those of your neighbors from watering from these springs and creeks which you have been obliged to inclose.

If these horse-pastures only included the lands patented to the ranchmen, I think I am safe in saying that every drop of water owned in the arid region would be inclosed and the range-cattle business would cease.

Now, to explain the way these fences are made, I submit the following diagram as an illustration, showing the quarter section of land and the dotted line of the pasture fence:



Now, this pasture has, say, 500 acres of public lands inclosed, and 30 acres of patented land on which there is water. The other 130 acres of patented land through which the stream runs is left open to the public. It is more than likely the persons having a pasture of 2,000 to 4,000 acres, the major part of which is public land, is the owner in fee of three or four times as much, which is left open for the use of everybody.

There is no thought on the part of the ranchmen as to where section lines run, when such lines do not include or exclude water. Every fence built here is built with reference to the water, and not with reference to the ownership of the land. Water is not fenced in; it is fenced out.

Of the 13,000 acres or thereabouts which I own in fee, nearly all of which is patented, the average cost of which exceeds \$15 per acre, more than 12,000 acres is used in common by all the cattlemen having stock in this county. If I were to fence this land, as I have an undoubted right to do, it would reduce the range capacity in this county at least one-third.

Now, instead of fencing in this valuable property, I leave twelve-thirteenths of it open for public use, and only inclose barely enough to furnish water for ranch purposes and for the horse pastures.

As you will readily see, the ranchmen do not intend to violate the law in any respect, much less to defy it. It is his interest to see that the law is stringently enforced—everything he has depends on that—nor does he intend to evade the law. In making these horse pastures he simply does what the necessity of the case demands. He includes in the pasture the arid waterless Government land that the cattle of all may have free access to the water he owns, and which he has a right to include in the pasture instead of the Government land. That is to say, he leaves his valuable patented land out as public domain and takes in the dry Government land.

If there was any intention to defraud, or any conceivable injury resulting to any one, some fault might be found on the part of the Government, but there is nothing of the kind. No one is kept from the public domain. No land is fenced that any settler objects to, and none that the Government ought to object to. The climatic conditions that exist here and throughout the arid region are such as to demand the protection which ranchmen have and will of necessity secure by these small fences.

It is a lamentable fact that the existing land laws are such that this fencing of the public domain becomes unavoidable. The laws were not made for this country or for the conditions which exist here. They have no more application to the arid region of the United States than they have to the great central plateaus of Asia. When they were enacted all this vast region was considered a hopeless and irredeemable desert. In the eyes of our legislators of those days it was a barren desolation of sand. The laws were made and all the decisions and regulations were enacted to apply to the fertile and arable lands of the Mississippi and Missouri Valleys, where every acre is susceptible of cultivation and will produce large crops with the natural rainfall. In New Mexico no crop whatever can be produced except by irrigation, and the land in this Territory upon which water can be carried will not exceed 2 per cent. of the total area, and I think it will be safer to say not 1 per cent. The statements that you see made by parties interested that the rainfall is increasing over the arid region is a grave mistake. The record shows that there has been no increase in the rainfall in the last forty years anywhere west of the one hundredth meridian.

Another fact well known to every investigator seems to have escaped the attention of our authorities, and that is that nowhere on the face of the globe have the ordinary crops upon which the human family subsists, such as wheat, corn, potatoes, &c., ever been produced at an altitude above 4,000 feet without artificial irrigation. This country, therefore, can never be an agricultural country, and the sooner that idea is abandoned the better will it be for the Government and the people living here.

I will give you other reasons very briefly why the ranchman needs and must have fences. We have to take up our bulls in the autumn and keep them in inclosures until the following July. This is done for two reasons: First, to care for the animals during the winter, that in many cases have cost us \$100 each; and second, to keep them from the she stock, so that early calves will not be dropped. If the bulls were allowed to run out during the entire year the loss among them would be very great, and the loss among the cows who drop their calves during the winter or early spring would be much greater. We also need pastures to keep thorough-bred stock in for the purpose of raising our own bulls with which to breed up our herds upon the open ranges; otherwise the cattle of the entire range country would degenerate to the class now bred in Texas.

There is one other reason which deserves more attention than you have time to give it. There is a weed that grows here called "loco," which is very poisonous to horses, and the animals are fond of it. Whole herds have been destroyed in a few days by eating it; horses have to be kept from the ground where this weed grows, or they will all die. The State of Colorado pays a large premium for the destruction of this weed.

Now, in conclusion, I will say that since the order of the President I have taken down 34 miles of fence, which, counting a mesa used on one side of the pasture, make over 50 miles. I have fenced in at my home ranch, where I own 320 acres of land, about 150 acres. At Sand Spring, where I have 480 acres of land, I have about 300 acres fenced. At San Rafael I have a horse pasture where I keep my bulls, thoroughbred stock, altogether about 6,000 acres, as near as I can estimate. Around the Rafael ranch there is probably a hundred acres. This includes all my fencing. I have patents for something over 9,000 acres of land, and final certificates and deeds for about 4,000 acres more. My land and the improvements upon it have cost me over \$200,000.

I have not intended to omit a single fact in relation to my personal interest. I have submitted to you and the gentlemen with you all my deeds, papers, maps, &c., and given you all the information in my power. I regret that the honorable Secretary himself and the Commissioner of the General Land Office are not able to make personal examination of some of the ranches in this Territory. I am sure that such an investigation would only result in good to the Government and the people who are interested here. It would be a complete answer to all the wild newspaper stories and to the absurd exaggeration of over-zealous and dishonest people. The fairness with which you dealt with this question in all of its aspects is recognized by the people, and further investigations of the same character, and conducted in the same manner, will redound greatly to the benefit of the ranchmen and the Government.

I am, very truly, yours,

S. W. DORSEY.

Hon. R. W. HUNTER,
Santa Fé, N. Mex.

It will be perceived that there is no denial by the writer of this letter that the public domain has been unlawfully fenced, and no apology is suggested for the unlawful acts. The ingenuous simplicity which, without concealment or defense, admits the violation of the law, and the naïve frankness which asserts that reasons exist why the violation should be continued, are equaled only by the innocent unconsciousness of any moral wrong in thus deliberately disregarding the laws of the country.

Fence building, according to this letter, was a "mania" from 1878 to 1881, "when a vast number of inclosures of public land, ranging from 10,000 to 2,000,000 acres, existed all along the Rocky Mountain slope. Every one engaged in the cattle business, who could raise money enough, had as large a pasture as he could build; and the Government made no objection to such inclosures!" But building the fences, the writer proceeds to state, was a mistake, not in the light of a legal offense, a moral wrong, or a public injustice, but a mistake of economic theory on the part of live-stock raisers, and "when the great noise and din was raised in the newspapers about it, the ranchmen themselves, as a general rule, were more opposed to fences than any one else." Fencing in the public domain for private use, or, to quote his language more accurately, the question of "fencing in the public domain for private uses, is a thing of the past." The Government need give itself no more trouble about it. The cattle men will relieve the Government of its supervisory and executory functions in respect of such fences.

The ranchmen will do their own policing. All they want is to be let alone.

Whilst, however, the writer of this letter asserts that when the President's proclamation was issued commanding the fences to be taken down, "there were but few left to be removed," he twice mentions that in speaking of the removal of fences he refers to "large pastures." As fenced pastures embracing over 30,000 acres are known to this Department, some uncertainty arises as to what is meant by the term "large pastures." The writer himself states that he has taken down 34 miles of fencing since the President's order was issued, and that of land owned by him, he has now under fence about 350 acres, "besides about 6,000 acres" which he does not state that he owns. He insists, however, that the fences have all been removed, all except from such small pastures as 30,000 acres and the mere bagatelle of 6,000-acre "horse-herds," &c.

He emphatically asserts that for these "not large" pastures ranchmen must have fences, and that in having fences "must necessarily trench more or less upon the public domain." If they do not "trench" they must do worse, viz, "inclose their own lands." In this dilemma it is a kindness to the public to fence the public lands. Clearly, the magnanimity of the cattle-men in leaving their own land unfenced while they fence in the public domain is as admirable as their patriotism in being willing to see to it, without expense to the Government, that their own fences do not keep anyone else out of the inclosures of the public domain that they must and will maintain. True, "there has been the unlawful fencing of the public domain by ranchmen;" true, there are "reasons why such fences were built and are still maintained;" true, that the ranchman "needs and must have fences"; but in placing these fences on the public lands "he does not intend to violate the law in any respect." In maintaining them he certainly does not intend "to defy the law," nor yet in neither case does he intend to "evade the law." In evading the law, in violating it, in defying it, he simply "does what the necessity of the case demands." He is compelled to evade the law; he has no choice about it. He is under an overpowering obligation to violate the law. It is not a matter of volition. He defies the law, not because he would, but because he must.

The question arises, what is this paramount and irresistible necessity which compels these gentlemen to violate a law that they "do not intend to violate," which forces them to defy a law which it is to their "interest to see stringently enforced," and which they are ready to enforce for the Government free of expense? It is simply the necessity that foreign capitalists and native persons should individually or as corporations become the owners of large herds of cattle. The writer of this letter states that the land laws were not made for New Mexico or for the conditions which exist there; that "they have no more application to the arid regions of the United States than to the great central plateaus of Asia;" and he emphatically declares "it is a lamentable fact that the

existing land laws are such that this fencing of the public domain becomes unavoidable." Unless the public domain can be unlawfully and exclusively appropriated by those who have money enough to gather large herds, the herds of single proprietors must be limited to such number as can be supported on lands of their own, or in any event materially restricted through the common use of the public pastures by the aggregate of small occupants.

The oft-repeated assertion that no one is kept from the public domain by the inclosures of the large cattle-owners, and that no land is fenced that settlers object to, is not entitled to consideration.

The assertion made in the above letter as to the extent to which the whole water-supply of the arid regions is held in absolute ownership, or claim of ownership, by the ranchmen, is startling indeed. There can be no permanent residence in a country where water is not public. Control of all the water gives exclusive and permanent control of all the land to the water owners. How private ownership by ranchmen and cattle companies of the water-supply of the arid regions, upon which all hopes of the future population of the country depend, has been acquired, is a question of much interest.

Under what laws has this individual proprietorship of the waters of continental life been secured by a comparatively few persons and corporations? The land laws of the United States applicable to the region west of the 100th meridian do not generally provide for the disposal of lands by public sale or private entry. Except in a few restricted localities the lands in this region have never been subject to direct money-purchase. As a rule they could be acquired only through settlement and improvement. The information of this Department, I lament to say, confirms the assertion as to the prevailing if not universal control of water through claim of ownership of adjacent lands, patented or entered for the most part under settlement and improvement laws. Yet settlers on such lands are rarely known. The most diligent inquiries of the local land officers fail as a rule to disclose that they ever were known, although it is not infrequently discovered, as stated in the Commissioner's report, that the names used are fictitious.

When it is considered that all the lands on both sides of streams are taken up, as shown in many instances by the records and plats of the General Land Office, by consecutive chains of pre-emption, homestead, and other conditional entries, groups of which seem to be made almost simultaneously; that proofs are presented of them at about the same time and the same witnesses swearing to stereotyped declarations; that transfers of the claims are made to the same persons; that the entries are represented before this Department in the same collective interests; and that the purported entrymen, as shown by official investigations, were (if actual persons) employes of those who received or claim the title, the suspicion is difficult to resist that the entries in such

cases were falsely made for the purpose of securing control of the water and thereby of all of the so-called arid regions of this vast territory.

I am aware that these are startling suggestions. Their authority is found in official reports of accredited agents of the Government under this and preceding administrations of this Department, and the sworn testimony adduced, often at the risk of life itself, in hearings before public land officers, at which those who claim the ownership of lands through entries of this character have all the opportunities to intimidate and tamper with witnesses, and, as against the Government, all the advantages to evade justice. The necessity which is urged in defense of the unlawful fencing of public lands can, with equal justice, be urged in extenuation of unlawful acquisition of titles to these lands. There is, in my opinion, no difference between the two. In either case it is the necessity of personal aggrandizement at the expense of the public interest and in violation of public law.

The miscalled arid regions of the country are simply regions where the land is not susceptible of cropping to cereals or roots without artificial irrigation. But they are not arid in any true and comprehensive sense. They are the natural pastures of the continent. These lands produce native grasses of a surprisingly succulent character. Starting fresh and vigorous in the spring, they ripen and sweeten in the summer and cure themselves for the winter. Cattle feed upon them the year round. The assertion that great capital and combined organization are necessary to the utilization of this ready wealth of nature is without foundation. Equally untrue is the assertion that the land laws of this country do not apply to these regions and are not adapted to their conditions. These land laws are made for the masses of the people and not for privileged persons. They contemplate an aggregate of small holdings in the hands of a great number of occupants.

These plains and plateaus are permanently adapted for the homes and husbandry of poor men and the production of stock by farmers of moderate means. Left to free public access, and to the enterprise and industry of the people, under laws securing to each actual occupant a limited area and a common right to the public water, these lands are sufficient for the outpouring emigration from eastern and central States until settlement and inhabitancy, in their natural processes, and by the aid of their aggregate accumulation, find means to develop their productive capacity and make room for many millions yet to come.

But certain individuals want great areas; they want the single control of great herds of cattle; and hence it is that this concentrated combination, with its dominion over the waters of that country and its audacious seizure of its public lands, turns back the tide of immigration, absorbs all existing settlements, and repels from its borders the advancing progress of development.

The suggestion frequently made that an enforced discontinuance of this cattle monopoly would imperil the beef supply of the Atlantic seaboard, is simply absurd. Cattle grow upon the land and are not created

by the ranchmen, and will thrive and grow under the management of a hardy and industrious population fully as well as under that of corporations and ranchmen, with their cowboys as employés. Indeed, the opposite is more apt to be true, for the producers in the Central States, who have to raise their cattle upon lands for which they have paid a price and on which they bear the burdens of taxes, have found stock production hazardous, and have been compelled to change their methods of husbandry and go out of the business of individual stock production on individual farms, so that the price of beef to consumers will, unless some arrest is made to this monopoly, be at their mercy.

On the 30th of October following the proclamation of the President ordering the immediate removal of every inclosure maintained by any person, association, or corporation, I addressed a communication to the Attorney-General, announcing the following views upon the rules which should govern in taking action under said act of Congress to accomplish the purposes of the law as speedily as possible:

First. Where there is an honest but mistaken claim of right on the part of those engaged in the erection or maintenance of fences, proceedings by suit to abate should be resorted to.

Second. Where unlawful fences are being erected immediate prosecution should be instituted against the principals and employés engaged therein.

Third. Where fences heretofore erected remain, requests should be made for their removal; if not removed speedily, prosecution should be instituted.

Fourth. Where fences heretofore erected are not removed on request, the civil arm of the Government should proceed in clear cases to abate without suit; if obstructed by force, then the military should be invoked.

What has been accomplished hitherto has been through the efforts of the agents of this Department and by process through the civil tribunals. Believing that the military should be sparingly used in a Government like our own, I hesitated to advise the use of this arm of the Government where the civil power could be effectively invoked; and so far the military power has not been brought into requisition. Whatever appliances, however, the law has placed in the hands of the Executive will hereafter be invoked, if necessary, to put a final end to this enormous plundering of the public domain.

FINANCIAL STATEMENT.

Salaries:

Appropriated	\$490,850 00
Expended	462,078 05
Balance	<u>8,771 95</u>

Public-land service:

Appropriated	\$1,494,142 00
Expended	<u>1,163,231 63</u>
Balance	<u>330,910 37</u>

The salary of the Commissioner of the General Land Office is by no means commensurate with the arduous duties imposed upon him. I recommend that it be increased to \$5,000.

RAILROADS.

The report of the Commissioner of Railroads and the Railroad Engineer, herewith transmitted, give full details of the condition and material facts pertaining to the several railroads aided by the Government, to which your attention is invited. The report of the Engineer shows, the roads generally to be well constructed and equipped, with steady advances in improvements, so far as he has inspected within the past year. The report of the Commissioner embraces twenty-two railroads subsidized or aided by land grants, mainly west of the Missouri River.

THE UNION PACIFIC SYSTEM

The Union Pacific includes the Union Pacific, Kansas Pacific, and Denver Pacific Railroads. The aggregate mileage of these roads and their several branches is 1,835.17 miles, of which 1,428.42 miles are aided, the balance unaided. This system controls 19 auxiliary roads, with an aggregate mileage of 2,687.08 miles, making the total mileage operated by this system 4,522.25. Within the past year \$548,317.30 have been expended upon improvements. At the end of the fiscal year it owned 350 locomotives, 285 passenger and 7,466 freight cars. The total acreage of its land sold is 12,260,163.64, for which it has received \$21,667,734.70, and on which sales there yet remains unpaid \$13,986,939.15. Its total debt is \$159,439,292. Its stock is \$60,868,500; assets, \$253,745,269.37. Among the creditors of the road the United States is prominent. The subsidy bonds unpaid are \$33,539,512, in addition to which the interest paid by the United States is \$37,124,295.66, making an aggregate liability to the United States of \$70,663,807.66.

The Union division, total earnings.....	\$12,215,484 71
Operating expenses.....	5,990,394 41
Surplus earnings.....	6,225,090 30
The Kansas division, total earnings.....	3,815,287 22
Operating expenses	1,891,711 83
Surplus earnings.....	1,923,575 39

The funded debt of the Union Pacific Railway on the 30th of June, 1886, was \$115,048,189.50, which is a decrease within the year of \$1,393,807.50. Of the 21 auxiliary roads operated by the company, it owns a controlling interest in the stock of 19, and of \$40,352,000 of bonded debt thereon; it owns \$24,080,000. The average debt of these auxiliary companies in stocks and bonds is \$30,743.31 per mile, of which the Union Pacific holds \$21,695.22 per mile. The deficit within the past year of the business of these auxiliary roads is \$1,288,618.92.

This deficit, however, it is claimed by Mr. Adams, president of the company, is apparent only, representing not money paid out, but book accounts or interest which has accrued on securities largely held by the Union Pacific itself. It is further claimed that during the year the auxiliary lines as a whole not only paid their own operating expenses and \$1,300,000 in addition thereto, but also contributed to the main or aided line of the Union Pacific some \$5,000,000 worth of traffic which otherwise it would not have received.

THE CENTRAL PACIFIC.

This road is operated under a lease by a corporation known as the Southern Pacific Company, a corporation of the State of Kentucky. The lease is dated February 17, 1885, and went into effect on April 1, 1885. There has been a decrease in the gross earnings of this system of roads within the last year of \$449,299.32, while the report shows an increase of net earnings of \$2,430,512.79. The report of this company is incomplete. It owns 234 locomotives, 325 passenger cars, and 4,463 freight cars.

Liabilities, exclusive of stock.....	\$122, 148, 538 73
Capital stock	59, 275, 500 00
Total stock and debts.....	181, 424, 038 73
Among its liabilities are United States subsidy bonds.....	27, 855, 630 00
Interest on subsidy bonds, accrued but not due.....	30, 134, 826 61
Aggregate	57, 990, 506 61
Gross earnings of the aided portion of road for the year ending on the 31st of December, 1885	5, 949, 214 73
Total expenses.....	5, 085, 605 76
Net earnings.....	863, 548 97

THE SIOUX CITY AND PACIFIC.

The main line of this road consists of 101.58 miles of railroad. It has a branch of 5.84 miles, making the whole mileage 107.42. It owns 12 locomotives, 13 passenger cars, and 167 freight cars. The road is not well ballasted, but from the character of the soil over which it runs it should be.

Received of the Government subsidy bonds.....	\$1, 628, 320 00
Accruing interest thereon is.....	1, 757, 395 09
Total.....	3, 385, 715 09
Transportation applied to the interest.....	201, 550 11
Balance in favor of the Government.....	3, 184, 164 98

CENTRAL BRANCH, UNION PACIFIC.

Of this road 100 miles, from Atchison to Waterville, is subsidized. It owns 35 locomotives, 22 passenger cars, and 558 freight cars. It received from the Government 245,000 acres of land.

Subsidy bonds	\$1,600,000 00
Interest accrued on bonds	1,837,808 26
Total	3,437,808 26
Total debt and stock	6,782,161 66
Total assets	4,784,858 46
Deficit	1,997,303 20

On account of the debt owing to the United States it is entitled to a credit of \$263,712.16, leaving balance due to the United States, \$3,174,096.10.

NORTHERN PACIFIC.

On the 30th of June, 1886, the total mileage of this road was 2,800.60 miles. It owns 386 locomotives, 274 passenger cars, 9,492 freight cars, and 1,042 cars used in special service and repair of the road. The road and its equipments are in good condition. It received by patent and certification from the United States up to June 30, 1886; 11,459,836.75 acres of land, of which it has sold 5,830,871.26 acres. It has received on account of the land sold \$20,836,000.02, with \$3,676,204 outstanding on time sales.

Total assets	\$169,588,393 85
Total debt and stock	169,385,234 24
Surplus	203,159 61
Total debt	82,326,923 25
Capital stock	87,058,310 99

OREGON AND CALIFORNIA.

This company operates 451 miles of road. It received from the Government 323,068.68 acres of land, of which it has sold 237,773.78 acres, and has received therefor \$384,389.72, with \$385,647.67 yet outstanding. It owns 43 locomotives, 40 passenger cars, 592 freight cars, and 225 miscellaneous.

Total debt and stock	\$34,804,598 44
Total assets	34,190,896 69
Deficit	613,701 75

SAINT PAUL AND DULUTH.

This road owns 178.50 miles of track and leases 46.50 miles, thereby operating in all 225 miles. Its equipment consists of 43 locomotives, 36 passenger cars, 1,441 freight cars, and 117 miscellaneous. It received from the United States 1,466,009.46 acres of land, of which it has sold

308,955.44 acres, receiving therefor \$1,718,108.90, and leaving outstanding on time sales \$38,458.41.

Total stock and debt.....	\$11,497,473 88
Total assets.....	11,483,338 41
Deficit.....	14,135 47

CHICAGO AND NORTHWESTERN.

The total mileage of this company is 4,771.69 miles. Its equipment consists of 681 locomotives, 477 passenger, 20,966 freight, and 155 miscellaneous cars. It received by patent from the Government 2,956,176.69 acres of land, of which it has sold and conveyed 1,266,128.74 acres, and has received therefor \$4,209,473.82, with \$930,739 yet outstanding.

Total assets.....	\$184,162,760 53
Total stock and debt.....	169,064,466 02
Surplus.....	15,098,294 50

CHICAGO, ROCK ISLAND AND PACIFIC.

This company received from the Government 1,261,181 acres of land, of which 16,749.93 are yet unsold. It owns 331 locomotives, 229 passenger, 7,856 freight, and 700 miscellaneous cars.

Total assets.....	\$72,684,273 80
Total stock and debt.....	72,139,751 16
Surplus.....	544,522 64

CHICAGO, BURLINGTON AND QUINCY.

This company and other companies with which it consolidated have received from the Government 2,781,714.77 acres of land, of which 108,368.79 are unsold.

Derived from land sales.....	\$15,725,314 90
Yet outstanding on sales.....	3,670,104 83
Total assets.....	177,652,466 09
Total stock and debt.....	166,624,785 25
Surplus.....	11,027,680 84

DUBUQUE AND SIOUX CITY.

This road owns 142.89 miles of track, with 25.19 miles of siding. Since October 1, 1867, it has been operated by the Illinois Central. It owns no equipment. It received from the Government 548,697.60 acres of land.

IOWA FALLS AND SIOUX CITY.

This road owns a total trackage of 199.93. It has no equipment, but is operated by the Illinois Central Company. It received patents from

the Government for 640,256.11 acres of land, of which it still retains 26,447.37 acres.

Total assets.....	\$9,246,206 68
Total stock and debt.....	7,538,053 34
Surplus.....	1,708,153 32

SAINT JOSEPH AND GRAND ISLAND.

The mileage of this road is 251.70 miles. That portion which extends from Ellwood to Hastings was aided by a land grant. Its equipment consists of 26 locomotives, 17 passenger, and 661 freight cars.

Total assets.....	\$13,358,019 53
Stock and debt	13,357,034 16
Surplus.....	985 37

HANNIBAL AND SAINT JOSEPH.

The total mileage of this road, with its branches, is 292.78 miles. It is controlled by the Chicago, Burlington and Quincy Company. It owns 71 locomotives, 47 passenger, 38 caboose, 1,713 freight, and 168 miscellaneous cars. It received from the Government 781,944.83 acres of land, of which it has sold 565,333.43 acres.

Total assets.....	\$24,637,137 35
Total stock and debt.....	22,875,832 49
Surplus.....	1,761,304 86

MISSOURI PACIFIC.

This company owns 859 miles and leases 136 miles of road. Its equipment consists of 176 locomotives, 83 passenger, 32 baggage, mail, and express, and 6,216 freight cars.

Total assets.....	\$67,418,795 79
Total stock and debt.....	62,625,499 18
Surplus.....	4,793,296 61

MISSOURI, KANSAS AND TEXAS.

The total mileage of this company, owned and leased, is 1,386 miles. It received a land grant over a distance of 183.20 miles, of which 952,913.07 acres have been patented, from the sale of which it has received \$2,874,803.21, with \$60,439.66 yet outstanding. Its equipment consists of 155 locomotives, 87 passenger, 4,483 freight, and 17 miscellaneous cars.

Total stock and debt.....	\$90,351,908 28
Assets	86,836,346 47
Deficit.....	3,515,561 81

SAINT LOUIS, IRON MOUNTAIN AND SOUTHERN.

The total mileage of this road laid is 923 miles. Its equipments are 144 locomotives, 95 passenger, 4,368 freight, and 30 miscellaneous cars. It received by patent from the Government 1,389,995.27 acres of land, of which it yet retains 921,459.61 acres. It has received as the proceeds of lands sold \$1,523,271.41, and has yet outstanding on account of such sales \$659,294.84.

Total assets.....	\$63,776,481 84
Stock and debt	60,912,362 04
Surplus.....	2,864,119 80

SAINT LOUIS AND SAN FRANCISCO.

The total mileage of this road is 814.87 miles. Its equipments are 105 locomotives, 81 passenger, 3,646 freight, and 12 miscellaneous cars.

Total assets.....	\$60,769,945 28
Total stock and debt.....	58,203,373 46
Surplus.....	2,566,571 82

MEMPHIS AND LITTLE ROCK.

This company is now in the hands of trustees, appointed by the United States court. Its mileage is 135 miles. It received from the Government 184,185.08 acres of land.

Assets, as returned.....	\$511,173 87
Liabilities	177,499 31
Surplus.....	333,674 56

ATCHISON, TOPEKA AND SANTA FE.

The total mileage operated by this company is 2,829 miles. Its equipments are 353 locomotives, 248 passenger, 9,659 freight, and 775 miscellaneous cars. The company received from the Government 3,328,195.40 acres of land, of which it still retains 347,254.12 acres. Its receipts from land sales have been \$9,541,252.94, and on that account has yet outstanding \$1,586,265.97.

Total assets	\$105,084,623 42
Total stock and debt	98,213,084 47
Surplus	6,871,538 95

ATLANTIC AND PACIFIC.

The total mileage of this road is 920.40 miles, of which 102 miles are operated by the Saint Louis and San Francisco Railway Company. Since 1880 it has received from land sales \$577,702, and has yet due on that account \$120,235. It owns 23,037.36 acres of land yet unsold.

Total stock and debt.....	\$103,811,240 02
Its assets are.....	102,840,904 38
Deficit.....	970,335 64

SOUTHERN PACIFIC.

This company operates in its northern division 220 miles of road. It has received from the Government 1,228,456.46 acres of land, of which it retains 266,506.08 acres. It has now outstanding on land sales \$2,472,541.53.

Total assets.....	\$80,907,452 75
Total stock and debt.....	77,170,139 46
Surplus.....	3,737,313 29

FINANCIAL STATEMENT.

Salaries:

Appropriated.....	\$14,420 00
Expended.....	13,929 10
Balance.....	490 90

Traveling expenses:

Appropriated	3,000 00
Expended	1,897 04
Balance	1,102 96

GOVERNMENT DIRECTORS OF THE UNION PACIFIC RAILROAD COMPANY.

I ask attention to the report of the Board of Government Directors of the Union Pacific Railway Company, setting forth the earnings, expenses, income, and expenditures of that company, with a statement in relation to the funded and other debts of the company and extensions.

The Board earnestly recommends the passage by Congress of some act which will settle the present unsatisfactory relations between the Government and the railway company, basing the recommendation substantially upon the following considerations:

The transcontinental business of the road, from which it was originally expected that it would derive its principal support, now constitutes but 7½ per cent. of its revenue. It is, therefore, upon its local business that it must rely for its principal support. In competing for this local business it is essential that it be put upon an equality with rival roads, in respect to raising funds, giving guarantees, and constructing, buying, or leasing other roads. The construction of additional feeders is recommended before the ground sought to be covered is occupied by rival companies.

Existing legislation relating to the road is criticised as follows:

The annual payment provided for is so small as to cause an annual increase of the company's debt of considerably more than half a million. No provision exists for the payment of the principal and accrued interest, which will become due in about ten years. The investment of the company's sinking fund is at so low a rate as to occasion an annual loss to the company of over \$200,000. The method of ascertaining the amount to be annually paid by the company is vague and uncertain,

differences of opinion constantly arising between the officers of the Government and those of the company, ending in costly and protracted litigation.

The condition of the road is stated as excellent. Since the submission of the report of the Board of January 30, 1886, floating debts have been entirely paid off, the bonded debt reduced, and about 100 miles of valuable feeders constructed. Within a few years large amounts of 6, 7, and 8 per cent. bonds will fall due, which can be refunded at much lower rates of interest.

The directors therefore recommend the passage of the bill reported by the House Committee on Pacific Railroads (H. R. 8318), now pending, which provides for the final adjustment of the debt of the Union Pacific Railway Company, and corrects the defects in existing legislation above enumerated. In this connection the directors say:

The obligations of the railway company to the Government may be treated as a single debt of about \$70,000,000 due July 1, 1897.

The present value of that debt, at 3 per cent., simple interest, is about \$53,000,000, or, in other words, that amount paid now in cash would extinguish the debt at maturity if allowed to accumulate even at simple interest. But the railway company, instead of paying that amount in cash at a single payment, is to pay \$1,807,000 per annum for seventy years. The first year's payment will be equal to interest upon the entire cash debt at 3 per cent. (\$1,590,000), and \$217,000 on the principal. Each succeeding year's payment would reduce the principal by a still larger sum, until the seventieth or last, nearly the whole of which will be applied to the principal.

The directors express their entire confidence in the present management of the road, and their satisfaction with the present condition of the company's affairs.

I think the views presented by the board touching a final settlement of the existing unsatisfactory relations between the Government and this company are entitled to immediate consideration.

The proposition to anticipate the maturity of the debt, which is still about eleven years off; to treat it as due; to ascertain the amount which, if accepted by the Government now in cash, would be the exact equivalent of the debt at maturity; to then give the companies a term of years in which to pay the amount with 3 per cent. interest in semi-annual equalized payments (the first payment being of an amount in excess of interest at 3 per cent. upon the whole present debt, so that from the first a part of the principal should be paid, and afterward in increasing amounts), seems to me a wise settlement for the Government, provided the present lien should be enlarged to cover, along with its present trunk-line security, all of the companies' interests in their branch lines, and all their property of every kind.

SUSPENSION OF PATENTS TO THE NEW ORLEANS PACIFIC RAILROAD COMPANY.

In my last report I remarked at length on the matter of the assignment of its land grant by the New Orleans, Baton Rouge and Vicksburg

Railroad Company to the New Orleans Pacific Railroad Company, and alluded to the fact that the right to make the transfer was a question of grave doubt.

Prior to my incumbency patents had been issued to the New Orleans Pacific Railroad Company for 679,287.64 acres. In consideration of protests that had been filed against the issue of these patents, of the allegations that the selections by the company had been granted to the State of Louisiana under the swamp grant, of the homestead and pre-emption claims of actual settlers, and of the doubt relative to the transfer, I issued an order March 10, 1885, still in force, suspending the further issue of patents to the New Orleans Pacific Railroad Company.

In giving the reasons in my former report for this action I used the following language:

Prior to the 3d of March, 1885, selections of land had been made by the New Orleans Pacific Railroad along the line of its route, between New Orleans and Shreveport, to the amount of 1,015,993.76 acres; in pursuance of which, on the 3d of March, in obedience to the direction of the Secretary of the Interior and the Commissioner of the General Land Office, patents were issued to the company for 679,287.64 acres.

Unusual assiduity was manifested, apparently having for its purpose the patenting of the whole amount of the selections of the company before the Department should pass under the control of the then incoming administration.

As this remark has been construed into unfavorable criticism of the action of my predecessor in this matter, I desire here to state that I have seen in that action nothing inconsistent with the strictest good faith and honest administration.

A hearing was subsequently had on a motion for the revocation of the order. On full consideration of the subject I had the honor to suggest the propriety of legislative action that would cure any defect that might exist in the transfer alluded to, and that would vest the title granted to the New Orleans, Baton Rouge and Vicksburg Railroad Company, from Whitecastle to Shreveport, in the New Orleans Pacific Railroad Company.

A bill is pending in Congress, having passed one branch thereof, with the above object in view.

PENSIONS.

There is submitted herewith the report of the Commissioner of Pensions, which exhibits in detail the operations of that Bureau during the past fiscal year. The report indicates a greatly increased amount of work at a considerably diminished expenditure and with less clerical force, evincing skill and activity in its management.

In considering appeals from the decision of the Pension Office I find some classes of cases of such peculiar hardship that I deem amendatory legislation advisable. I call attention to sections 4696 and 4707. Section 4707 limits the claim of dependence on the part of an aged parent or a minor child, and fixes its initiative at the moment of time of death

of a soldier on account of whose death the dependent is made pensionable.

It seems to me to be a wiser rule, and a more just one, that where the dependence has occurred in the natural order of events at a time subsequent to the death of the soldier on account of increasing years, or of misfortune, not contributed to by the beneficiary, the dependent pension should then have its foundation and point of beginning.

I suggest such a change in the law as that in the case of parents of increasing years, or children of tender years below the age of sixteen, where their condition of physical dependence is not due to their fault, or habits, but is merely a matter of misfortune or time, that they should be allowed pension from the date at which the dependence in the natural and ordinary state of human affairs would begin; such pension in all cases, however, to be prospective, and in no case to anticipate the date of the approval of the law authorizing its granting.

Section 4696, Revised Statutes, provides that pension shall be issued at a rate to be fixed, dependent upon the rank held by the soldier at the time he received the injury or contracted the disease which resulted in the disability on account of which he may be entitled to a pension. Under existing law it has very often happened that soldiers have been disabled, or have incurred disease, or have suffered from injuries in a certain degree, and that in spite of such injury or disease they have continued to perform military service, and have been promoted for efficiency, or gallantry, or meritorious conduct. They have not claimed pension until after discharge. Under existing law when pension is granted it is necessarily fixed at the lower rate allowed for the claimant's original rank, or, to speak more accurately, at the rank held at the time the original disability was incurred.

I suggest that the law be so amended so that the pension shall be allowed for the rank subsequently borne, *bona fide*, before discharge, or at date of discharge, where the disability is shown to have originated in the service and in line of duty, and subject to the further condition that in no event shall the pension antedate the law allowing such increase.

FINANCIAL STATEMENT.

Salaries :

Appropriated	\$1, 954, 650 00
Expended	1, 789, 545 76
Balance.....	165, 104 24
Outstanding liabilities	238 70

Salaries special examiners:

Appropriated	210, 000 00
Expended.....	165, 998 80
Balance.....	44, 001 20
Outstanding liabilities	3 85

Investigation of pension cases:

Appropriated	\$360,000 00
Expended	281,257 34
Balance	78,742 66
Outstanding liabilities	18,313 53

Investigation of pension cases, special examiners:

Appropriated	220,000 00
Expended	160,641 77
Balance	59,358 23
Outstanding liabilities	18,695 27

Army pensions:

Appropriated	64,172,000 00
Transferred from Navy fund	140,000 00
	64,312,000 00
Refunded by agents	3,486,035 27
Total subject to draft	67,798,035 27
Advances to agents	67,679,399 27
Balance June 30, 1886	118,636 00

Pay and allowances:

Appropriated	327,000 00
Refunded by agents	55,534 52
Total subject to draft	382,534 52
Advances to agents	376,200 00
Balance June 30, 1886	6,334 52

Examining surgeons:

Appropriated	490,000 00
Refunded by agents	59,063 39
Total subject to draft	549,063 39
Advances to agents	549,000 00
Balance June 30, 1886	63 39

Navy pensions:

Appropriated	1,000,000 00
Refunded by agents	62,145 36
Total subject to draft	1,062,145 36
Advances to agents	1,056,500 00
Balance June 30, 1886	5,645 36

Pay and allowances:

Appropriated	1,000 00
Refunded by agents	270 56
Total subject to draft	1,270 56
Advances to agents	1,000 00
Balance June 30, 1886	270 56

Examining surgeons:

Appropriated	\$10,000 00
Refunded by agents	818 55
Total subject to draft	10,818 55
Advances to agents	5,100 00
Balance June 30, 1886	5,718 55

ARREARS OF PENSIONS.

Army arrears:

Balance arrears fund on hand July 1, 1885	\$302,336 73
Refunded by agents	179,124 34
Total subject to draft	481,461 07
Advances to agents	85,646 26
Balance June 30, 1886	395,814 81

Fees:

Balance arrears fund on hand July 1, 1885	1,208 00
Refunded by agents	200 40
Total subject to draft	1,408 40
Advances to agents	25 00
Balance June 30, 1886	1,383 40

Navy arrears:

Balance arrears fund on hand July 1, 1885	46,779 06
Refunded by agents	26,978 60
Total subject to draft	73,757 66
Advances to agents	15,506 80
Balance June 30, 1886	58,250 86

Fees:

Balance arrears fund on hand July 1, 1885	131 20
Amount refunded by agents	31 10
Total subject to draft	162 30
Advances to agents	7 60
Balance June 30, 1886	154 70

BOARD OF PENSION APPEALS.

Anxious to procure the best talent that the salary would command for the six additional persons to be appointed by the Secretary of the Interior to aid him in determining appeals from the Commissioner of Pensions, required by act of Congress approved July 31, 1886, the organization of this force was delayed longer than accorded with my wishes. I am pleased to say, however, that since they have entered upon their duties the work has advanced with great rapidity. I recommend the continuance of the appropriation for another twelve months, at which time I think that the arrears will be entirely brought up. On the 1st day of November, 1886, there were 3,710 cases standing upon the appeal docket of this Department.

The record shows that during the past month the determination of cases has been not only far in advance of the number appealed from the decision of the Commissioner of Pensions, but that the increase in the disposal of the appeals has been 500 per cent. greater than in the month preceding.

THE PATENT OFFICE.

The report of the Commissioner of Patents upon the business of the Patent Office for the fiscal year ending June 30, 1886, shows :

Applications for patents received.....	37,695
Applications for design patents received	731
Applications for reissue patents received	168
Applications for registration of trade-marks.....	1,292
Applications for registration of labels.....	792

Total	40,678
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Caveats received.....	2,586
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Patents granted, including reissues and designs.....	24,134
Trade-marks registered	1,088
Labels registered.....	397

Total	25,619
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Patents withheld for non-payment of final fees.....	3,758
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The number of applications for patents, including reissues, designs, trade-marks, and labels, received during preceding fiscal years, from and including—

Year ending June 30, 1882.....	30,062
Year ending June 30, 1883.....	35,734
Year ending June 30, 1884.....	38,822
Year ending June 30, 1885.....	35,688
Year ending June 30, 1886.....	40,678

The receipts of the office during the last preceding as well as former fiscal years were as follows :

Year ending June 30, 1882.....	\$930,864 14
Year ending June 30, 1883.....	1,095,884 70
Year ending June 30, 1884	1,145,433 10
Year ending June 30, 1885.....	1,074,974 35
Year ending June 30, 1886.....	1,265,167 80

It is asserted, and is undoubtedly true, that the business of the office is in a prosperous condition, and that the current work, which was on an average five and one-half months in arrears at the commencement of the present administration, was at the time of the Commissioner's report within three months up to date. The Commissioner declares that he has "all the force which is really needed," and that with such force he expects to be able to bring the work substantially up to date within the next few months.

The Commissioner urges that additional room is very much needed, and several amendments to the existing statutes are suggested.

In the estimates for the ensuing fiscal year the aggregate amount is much less than that of the preceding year. The amount estimated for the fiscal year ending June 30, 1886, was \$890,760; the amount estimated for year ending June 30, 1887, was \$853,960; the amount estimated for the fiscal year ending June 30, 1888, is \$778,770.

It will be remembered that the law requires this officer to make in January of each year a report direct to Congress. I therefore deem it unnecessary to present anything further at this time in relation to this office.

FINANCIAL STATEMENT.

Salaries:

Appropriated	\$597,170 00
Expended	591,984 95
Balance	5,185 05

Scientific library:

Appropriated	3,000 00
Expended	3,000 00

Photolithographing:

Appropriated	85,000 00
Expended	77,477 25

Balance	7,522 75
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Outstanding liabilities	7,462 94
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Plates for Patent Office Official Gazette:

Appropriated	44,000 00
Expended	43,993 30

Balance	6 70
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Public use of inventions and defending suits:

Appropriated	1,000 00
(No expenditures).	

Foreign exchanges:

Appropriated	2,000 00
Expended	184 30

Balance	1,815 70
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BUREAU OF LABOR.

The Commissioner of Labor submitted his first annual report on the 17th of last March. It was impossible for him to submit a full report of the operations of the Bureau at an earlier date, because the Bureau was not organized until during the last half of the fiscal year ended June 30, 1885. This first report relates entirely to industrial depressions, and is the result of a plan outlined by the Commissioner, and approved by me March 17, 1885. It groups facts drawn from trustworthy sources in Europe and America, which show conclusively that the depression which has existed in the United States for the past half decade

or more has been contemporaneous, not only in features, but extent, with depressions in other industrial countries. The facts collected warrant the deduction that industrial depressions were largely exaggerated through the apprehension of business men and of the public generally, growing out of a want of clearly-defined knowledge of current events.

Among the various causes alleged by manufacturers and others for the existence of industrial depressions are to be found the irregularities existing in the rates of duty under present tariff legislation. The nature and influence of these irregularities are illustrated by statistics gathered by agents of the Bureau, relating to lines of goods manufactured in England and largely imported into our own markets. Many well-informed business men allege that high duties on imported goods constitute a serious disturbing influence in manufacturing, but they complain more of the inequalities in rates than of high or low rates of duty. The statistics just referred to show that in one line of goods manufactured at Leeds the variation is from 50 per cent. to over 180 per cent. on the price at the factory in England, the highest-priced goods named being west-of-England broadcloth, worth \$3.60 per yard in Leeds, the specific duty being 35 cents per pound and the ad valorem 40 per cent., making a total of 50.3 per cent. on the value at the factory, while it is further shown that this per cent. on cost steadily increases until it reaches 180.7 per cent. on low-priced goods.

These glaring inequalities are a potent cause of apprehension, in the minds of producers, of disturbance in values, and, therefore, of corresponding depressions. With these facts comes a most valuable suggestion to which I wish to call attention, and this suggestion the Commissioner puts in the following words:

The adjustment of rates of duty on manufactured goods should be in accordance with the labor cost of production, &c. * * * The labor cost in production and all the other elements of production must be considered before an equitable schedule can be arranged. Until some such basis is adopted the inequalities shown * * * will exist, although they may be shifted so far as products are concerned.

In discussing remedial measures the Commissioner says:

The judicious revision of the tariff, regulating duties on a just and equitable basis, in so far as it removes apprehension and puts all interests on a fairer basis, would be a remedial measure. Such adjustment would bring stability, would relieve manufacturers of anxiety, would satisfy labor, and would keep the Treasury supplied with funds. Practically these are the ends sought, it is presumed, by any adjustment of the tariff, &c. Any adjustment on the basis of the cost of production would inevitably result in a constant enlargement of the free-list, and in so far would have a moral effect in the community which could not be otherwise than healthful.

And, further, that a statutory provision should be made by which—the tariff should be regulated on a basis of justice and science, and not on a haphazard basis, which affects only individual interests and oftentimes inflicts general harm.

The original tables in the report comprehend about 40 industries, 759 establishments, and 150,000 employés, and they prove conclusively the feasibility of collecting exact information as to the cost of

production upon all great products of this country and the countries where such products come into competition in the commerce of the world. With such information it seems there would be little difficulty in adjusting tariff rates upon an equitable basis.

The operations of the Bureau for the present year are outlined as follows :

(1) An investigation into the number, causes, duration, and results and other features of all strikes occurring in the United States since and including the year 1881.

(2) An investigation into the hours of labor, wages paid, method of payment, term of duty, the condition, &c., of railway employes on all railroad systems in the United States.

(3) An investigation as to the kind and amount of work performed in the penal institutions of the several States and Territories of the United States and the District of Columbia, the methods under which convicts are or may be employed in such institutions, and as to all the facts pertaining to convict labor and its influence upon the industries of the country.

(4) An investigation into the distribution of products, the cost of producing and distributing such products so far as the leading articles of consumption are concerned, tracing each article from its production to its consumption, and gathering all the facts as to cost and method of distribution.

(5) An investigation into the employment, wages, condition, &c., of the women workers of great cities.

The Commissioner expects to be able to report early in the coming calendar year upon that part of his present work which relates to convict labor and, may be, to strikes.

The Bureau has been put on a very strong footing through the generous action of Congress in making appropriations in accordance with estimates, and it now stands in a position to perform its work thoroughly and promptly.

FINANCIAL STATEMENT.

Appropriated	\$40,000 00
Expended	38,393 33
Balance	1,606 67
Outstanding liabilities	1,593 51

THE GEOLOGICAL SURVEY.

The Director of the Survey sets forth in detail the plan and organization of the institution under his charge, and he then explains the character of the work occupying the attention of the different divisions, and points out its utility and importance in its bearing both on scientific research and economic development. With no substantial increase in the appropriation there has been executed a much larger amount of satisfactory work than has hitherto proved feasible, in the absence of those perfected methods which have been the outgrowth of experience.

Topographic work has been prosecuted with great energy, as will appear from the table given below, showing the areas surveyed during

the year; and while there has been a constant improvement in the character of the work, and in the way in which it has been found possible to delineate it on the General Atlas of the United States, in process of construction, it has been accompanied by a continuous diminution in the cost.

The agreement under which topographic work is carried on in Massachusetts, at the joint expense of the State and the General Government, continues, and more than half the area involved is now completed.

Area surveyed during the fiscal year ending June 30, 1886.

State.	Scale of publication.	Contour interval.	Area.
		<i>Fect.</i>	<i>Sq. miles.</i>
Alabama	1 : 125000	100	3,933
Arizona	1 : 250000	200	8,000
California	1 : 250000	200	4,600
Do	1 : 125000	100	2,400
District of Columbia	1 : 62500	20	15
Georgia	1 : 125000	100	2,452
Kansas	1 : 125000	50	13,700
Kentucky	1 : 125000	100	3,300
Maryland	1 : 125000	100	895
Do	1 : 62500	20	139
Massachusetts	1 : 62500	20	2,500
Missouri	1 : 125000	50	7,700
New Jersey	1 : 62500	20	1,843
Nevada	1 : 250000	200	2,000
North Carolina	1 : 125000	100	650
Oregon	1 : 250000	200	3,800
South Carolina	1 : 125000	100	600
Tennessee	1 : 125000	100	3,445
Texas	1 : 125000	50	8,000
Virginia	1 : 62500	20	154
Do	1 : 125000	100	5,103
West Virginia	1 : 125000	100	3,000
Wyoming	1 : 125000	100	1,000
Yellowstone National Park	1 : 125000	1,000	2,600
Total			81,829

The average cost of the work was about \$2.75 per square mile.

The geologic work of the Survey is carried on in twelve divisions, some of which are at present engaged in the study of problems in economic geology, while others are as yet occupied with that scientific research which must precede and form the basis for investigations of a satisfactory character in economic geology. One question which has engaged the attention of the Survey during the past year is an inquiry by the Atlantic coast division into the problem of reclaiming inundated coastal lands and the related question of the origin and distribution of phosphatic beds now in process of formation in the marshes of the Atlantic coast. From a study by another division of the quicksilver belt of Eastern California and Western Nevada many important additions to previous knowledge of dynamic geology have been made, and the sciences of physics and chemistry have been enriched by the discovery of new and important laws, the outgrowth of this investigation.

Considerable additions have been made to the collections in paleontology during the year, and through the light thrown by the paleontol-

ogists on a number of unsettled problems the work of the structural geologists has been materially forwarded.

In the chemical and physical laboratory of the Survey numerous analyses have been made of rocks, ores, mineral waters, &c., and original investigation in different directions has been encouraged. From this division of the Survey there has emanated a study of the saline and alkaline minerals of the United States.

The principal function of the Geological Survey is the discovery of mineral resources before unknown and the collection of facts of importance to the industries involved. From figures compiled by the Division of Mining Statistics and Technology, in which this branch of the work of the Survey receives attention, the following table has been made:

Metallic products of the United States in 1885.

Products.	Quantity.	Value.
Pig-iron, long tons, spot value.....	4, 044, 525	\$64, 712, 400
Silver, troy ounces, coining value.....	80, 910, 279	51, 000, 000
Gold, troy ounces, coining value.....	1, 538, 376	81, 801, 000
Copper, pounds, value at New York City *	170, 962, 007	18, 292, 990
Lead, short tons, value at New York City.....	129, 412	10, 400, 431
Quicksilver, flasks, value at San Francisco.....	32, 073	979, 180
Zinc, short tons, value at New York City	40, 688	2, 539, 856
Nickel, pounds, value at Philadelphia.....	277, 904	191, 753
Aluminum, troy ounces, value at Philadelphia.....	3, 400	2, 550
Platinum, troy ounces, value, crude, at New York City.....	250	187
Total value of metallic products.....		181, 589, 205

* Including copper from imported pyrites.

During the year the publications of the Survey were increased by the addition of the Fifth Annual Report, a second volume on the Mineral Resources of the United States, and fourteen Bulletins. The rapid growth of the Survey library, chiefly through the means of exchange, continues, and difficulty is found in suitably providing for its accommodation.

The Director of the Survey was called upon to spend considerable time in explaining the plan and work of the Survey to the joint commission appointed to consider the organization of the several scientific Bureaus of the Government. While recommending a slight alteration in the mode of publication practiced by the Survey, the Commission advocated no change in the plan of its organization, and found the administrative part of the work to be wisely and economically conducted.

FINANCIAL STATEMENT.

Amounts appropriated for and expended by the United States Geological Survey for the fiscal year ending June 30, 1886.

		Geological Survey.	Salaries office of Geological Survey.	Total appropriation.
Amounts appropriated.....		\$467,700 00	\$35,540 00	\$503,240 00
Amounts expended, classified as follows:				
Expenses.				
A. Services	\$335,342 99			
B. Traveling expenses	80,003 57			
C. Transportation of property	5,455 65			
D. Field subsistence	18,741 73			
E. Field supplies and expenses	25,808 58			
F. Field material	10,360 57			
G. Instruments	2,867 83			
H. Laboratory material	7,017 36			
I. Photographic material	5,574 84			
K. Books and maps	6,170 55			
L. Stationary and drawing material.....	1,018 52			
M. Illustrations for reports.....	764 00			
N. Office rents	1,782 77			
O. Office furniture	5,055 73			
P. Office supplies and repairs.....	4,797 38			
Q. Storage	391 25			
R. Correspondence.....	679 61			
S. Bonded railroad accounts: Freight, \$1,463.24; transportation of assistants, \$1,542.05	8,008 29			
Salaries.		459,840 67		
A. Salaries	35,009 46		35,009 46	494,850 13
Balance unexpended.....		7,859 33	530 54	8,389 87
Probable amount required to meet outstand- ing liabilities		7,859 33		

EDUCATION.

On the 5th of August, 1885, Hon. John Eaton, who has conducted the operations of this Burean during the past sixteen years with such distinguished ability and public approbation, resigned his commission on account of his failing health. The work covered by the year ending June 30, 1886, having been done under his supervision and direction and before his successor entered upon the duties of the office, Mr. Eaton, at the request of the latter, prepared the report of the operations of the office for that period. I commend this, the latest official production of this devoted and eminent laborer in the cause of national education, to your consideration.

FINANCIAL STATEMENT.

Salaries:	
Appropriated	\$45,420 00
Expended.....	44,255 93
Balance.....	1,164 07
Library:	
Appropriated	1,175 00
Expended.....	910 71
Balance.....	264 29
Outstanding liabilities	72 14

Collecting statistics:

Appropriated	\$3,000 00
Expended	2,785 75
Balance.....	214 25
Outstanding liabilities	211 25

Distributing documents:

Appropriated	3,000 00
Expended.....	2,364 44
Balance.....	635 56
Outstanding liabilities	104 29

ARCHITECT OF THE CAPITOL.

The report of the Architect sets forth the changes which have been made in the Capitol to provide additional committee rooms and for the storage of documents. The whole interior of the dome and such portions of the exterior as urgently required it have been painted. The cleaning of the exterior marble work has been continued and numerous improvements have been made throughout the building, which is in excellent condition of repair. The engineer in charge of the Senate heating and ventilating apparatus reports that extensive repairs were made to the boilers, quite disproportionate to their value, in order to insure efficient service during the last lengthy session of Congress, and that while, owing to their peculiar construction and location, they cannot be made to perform the service required of them as efficiently and economically as could be desired, they will probably last for some years to come unless it be deemed advisable to replace a portion of them with those of more modern construction, leaving room for electric-lighting machinery, engines, dynamos, &c.

A material change has been made in the main air uptake leading to the Senate chamber, and when the enlargement of the air duct leading from the outside shall be finished and a tower provided, opening out upon the grounds at a distance from the building, a present source of discomfort will be effectually removed. The engineer reports that no important changes were made in the heating apparatus of the House during the past year. Some repairs will be necessary before the assembling of Congress. He states that the boilers, which have been in use for twenty-nine years, are of a pattern now obsolete, and the expense of thoroughly repairing them would equal at least 50 per cent. of the cost of new boilers. He suggests the advisability of supplying their places with new boilers of modern construction.

The Architect states that the north terrace, section A, has been completed, with the exception of the bronze lamps and vases, which are to be placed upon the pedestals of the balustrade, and that satisfactory progress has been made in the construction of the other portions of the terrace. He considers it desirable that the central portion and the grand stairways should be built contemporaneously, in order to insure the use of material similar in shade and quality.

All the wood work of the new portion of the court-house has been painted, a well sunk in the western fuel cellar for more effectual drainage, and the heating apparatus and the whole interior of the building put in good repair.

At the Botanic Gardens an asphalt pavement has been laid from the First street to the Maryland avenue entrance, and the concrete roads ways have been repaired. The conservatory and the propagating houses have been painted and to some extent reglazed, and lamps have been placed around the basin of the Bartholdi fountain.

FINANCIAL STATEMENT.	
Salaries :	
Appropriated	\$18,364 00
Expended.....	18,364 00
Lighting Capitol grounds :	
Appropriated	20,000 00
Expended	20,000 00
Annual repairs :	
Appropriated	38,000 00
Expended	37,966 25
Balance	33 75
Improving Capitol grounds :	
Appropriated	35,000 00
Expended.....	31,750 01
Balance.....	3,249 99
Outstanding liabilities	2,998 98
Senate stable and engine-house :	
Appropriated	300 00
Expended	300 00
Capitol terraces :	
Balance July 1, 1885	207,000 00
Expended	150,463 38
Balance	56,536 62
Continuous appropriation.	

THE NEW PENSION BUILDING.

At the date of my last report the building had been so far completed as to provide quarters for a portion of the force of the Pension Office. As the rooms became available the remainder of the employés were transferred, so that by December 1, 1885, the entire force of the Bureau, together with its furniture and records, had been removed to the new building.

Work upon the building was suspended November 30, 1885, the available appropriation having been exhausted. At the last session of Congress \$89,000 was appropriated for completing the building and \$61,000 for extending the fourth floor around the whole building, to provide rooms for storing the records and constantly accumulating mass of papers, now occupying space which should be devoted to the general business of the Bureau. The supervising engineer and architect re-

ports that out of this appropriation permanent floors of masonry have been laid in all the rooms in the cellar; the brick work of the walls to support the new fourth floor has been commenced in about one-half of the third story; the lower gallery of the hall has been plastered for about one-half (432 feet) of its length; the material for the floor of the great hall and galleries therein is being prepared, and the brick work of the north and south staircases, which were unfinished when operations ceased last winter, is now being completed.

The total cubic contents of the building are 8,211,491 cubic feet, and after the fourth floor is completed the floor-space will be 188,258 square feet.

The total of the appropriations for the building, heating apparatus, gas-pipes, &c., is \$897,559.62, of which \$747,101.36 had been expended up to September 20, 1886, leaving the balance available for all purposes \$150,458.26.

FINANCIAL STATEMENT.

Balance July 1, 1885	\$94, 369 47
Expended	87, 769 14
Balance	6, 600 33
Continuous appropriation.	

ADDITIONAL OFFICE-ROOM FOR THE DEPARTMENT.

I cannot too strongly represent to the Congress the necessity for additional working space for the officers, employés, and records of this Department. The subject is not new, having been investigated by the Committee on Public Lands of the Senate, the Committee on Public Buildings and Grounds of the House of Representatives, and represented in various communications, within the last few years, to the legislative branch of the Government. It is not right that officials of the Government, expected to perform their whole duty and care for the records entrusted to their charge, should be hampered in their operations by lack of sufficient office space. Temporary make-shifts, like that of an additional floor in the Pension-Office building, do not properly meet the requirements of the service.

Ample and secure office accommodations should be constructed by the Government, and thus the necessity for the renting of private buildings at exorbitant rates be obviated.

The various Bureaus of the Department of the Interior should be brought together, for the reason that active power is often imparted to an office by reason of immediate contact of the officials in charge, both in a superior and subordinate capacity.

Last year the sum of \$43,884.21 was paid by this Department for the rental of office accommodations. This sum represents the interest at 3 per cent. per annum on a principal of \$1,462,807, at which rate the Government is able to procure all the funds desired for its operations.

It would be in the interest of economy to have suitable, permanent, fire-proof buildings, the property of the Government, erected for the accommodation of these offices, with a view to protection from fire and

consequent destruction of public records, instead of renting temporary quarters from year to year. Even this main building, popularly known as the Patent-Office building, is so crowded as to compromise the health of the employés. Light and ventilation are sacrificed, records, of necessity, placed in cases in the halls, a prey to vermin, and where they can neither be safe from interference nor subject to proper control. It is, therefore, to be hoped that the legislative branch of the Government will seriously consider this subject and provide the necessary relief.

GOVERNMENT HOSPITAL FOR THE INSANE.

The whole number of patients under treatment at this institution during the year was 1,524, the daily average being 1,219.62. The number of admissions was 303, discharges (including deaths) 257, leaving 1,267 remaining in the hospital at the close of the fiscal year.

The board of visitors recommend an appropriation of \$17,000 to provide additional accommodations for the colored insane. There are now 183 of this class of patients in the hospital, of both sexes. The lodges originally intended for their occupation accommodate only 90, leaving one-half the number to be provided for in the other already crowded wards. With the amount asked the Board state that by extending the lodges with large associate dormitories space for 100 beds can be provided. They also represent that the wharf at the river is in an unsafe condition and should be rebuilt. All the coal consumed in the hospital, amounting to over 3,000 tons annually, is received at this wharf. They ask for an appropriation of \$3,500 for this improvement. They renew their recommendations of last year for an appropriation (\$1,500) for a suitable building for the use of the custodian of the cemetery, which they regard as necessary for the protection of the graves from desecration, and for an appropriation of \$6,000 to provide for the purchase of additional land, adjacent to the hospital farm, needed for grazing the increasing herd of cattle from which the hospital supply of milk is derived. The necessity for these improvements and additions, as set forth in the report of the Board, would seem to commend their recommendations to the favorable consideration of Congress.

FINANCIAL STATEMENT.

Current expenses:

Appropriated	\$216,538 00
Expended	213,500 00
Balance	<u>3,038 00</u>

Buildings and grounds:

Balance on hand July 1, 1885	6,049 85
Appropriated	23,600 00
	<u>29,649 85</u>
Expended	14,100 00
Balance	<u>15,549 85</u>

Continuous appropriation.

FREEDMEN'S HOSPITAL.

The number of admissions to the hospital during the year was 2,131, an increase of 111 over the previous year. Of these 596 were white males, 107 white female, 734 colored males, and 694 colored females; 3,002 persons were prescribed for in the dispensary attached to the hospital. Of the admissions 186 were ex-soldiers and sailors who, coming to the city to look after their claims for pensions, disabled and without means of support, were temporarily provided with food and shelter in the hospital. The number of deaths was 212, which though large was less than in the preceding year. The surgeon-in-chief accounts for this rate of mortality from the fact that the patients are mostly from a class subjected to the worst hygienic, physical, and moral influences, and averse to receiving treatment until driven to it by necessity. A table submitted with his report shows that the greater proportion of deaths occurred within a few days after admission.

FINANCIAL STATEMENT.

Appropriated	\$49,500 00
Expended	49,496 25
	<hr/>
Balance	3 75
	<hr/>
Repairs to water-tank :	
Appropriated	260 00
Expended	260 00

WASHINGTON HOSPITAL FOR FOUNDLINGS.

The reports of the directors of the hospital, covering the period of its existence prior to July 1, 1886, afford the following history of that institution :

By the last will and testament of Joshua Pierce, who died at Linnæan Hill, near Washington, April 11, 1869, fourteen lots or parcels of ground, part of square 207, situated between R and S streets north, and Fourteenth and Fifteenth streets west, in the city of Washington, were devised and bequeathed to trustees to be held as a site for a hospital for foundlings, to be erected by any association, society, or institution that might thereafter be incorporated by act of Congress.

To carry into effect the provisions of this bequest Congress, by an act approved April 22, 1870 (Stats., v. 16, p. 92), constituted certain persons named therein a body politic and corporate under the name of the "Washington Hospital for Foundlings," defining the object of the association to be "to found in the city of Washington a hospital for the reception and support of destitute and friendless children." It was further provided that the foundlings received in the hospital shall be deemed and considered wholly under the guardianship, care, and control of said institution, to be educated, apprenticed, or otherwise disposed of in such manner as the directors of said hospital may, in

their judgment, deem for the best interest of said children until they shall attain the age of eighteen years, when said care and control shall cease. It was made the duty of the president and directors to report to the Secretary of the Interior the condition of said institution on the 1st day of July in each year.

The conditions of the will having been complied with by this act of incorporation, the trustees named in the will conveyed the real estate to the Washington Hospital for Foundlings by deed dated May 5, 1873.

There being no funds for the erection of buildings necessary to carry into effect the object of the institution, upon the application of the directors appropriations were made by the Territorial legislature of the District of Columbia, in the years 1872 and 1873, of cash and tax-lien certificates from which the sum of \$10,756.10 was realized. This sum was not deemed by the directors to be sufficient for the erection of suitable buildings and for current expenses, and they considered it best to foster their resources until they should be sufficient to warrant their practical application to the purposes of the hospital.

In their report for the year 1885 the directors value the assets of the hospital at \$46,028.77, including the real estate, estimated at \$28,670, and state that in the spring of that year a contract had been made for the erection of a hospital building upon the donated ground, after a plan prepared by J. S. Billings, surgeon, United States Army, to cost, when completed, \$23,500.

In their report covering the last fiscal year (1886) the directors state that their entire assets, exclusive of real estate, have been converted into cash. They were compelled for want of funds to suspend work upon the building until the appropriation of \$3,500, made at the last session of Congress, became available. Under that appropriation work was resumed and the building will soon be completed. They have so far expended \$21,000 on the building, and upon its completion, together with certain necessary extra work, their entire resources will be exhausted. They will then have a valuable property, suitable for the purpose for which the corporation was created, but will be without the means to furnish it for practical use.

The directors invite attention to the necessity for an institution of this character as rendered the more apparent from the police reports of abandoned and murdered infants, and express the belief that if the means were provided to bring the hospital into actual operation the exhibit made of good and needed work would so appeal to the public that they could rely largely upon private contributions to meet its current expenses. They therefore ask that an appropriation of \$10,000 be made by Congress for the purpose indicated. The suggestions of the board of directors meet with my approval, and I recommend an appropriation of the amount requested.

A board of lady managers has been organized with a view to aid in securing contributions and to assist in the management of the institution when it goes into practical operation.

COLUMBIA INSTITUTION FOR THE DEAF AND DUMB.

It appears from the report of the board of directors of this institution that the number under instruction therein during the year was 126, of whom 50 were in the collegiate and 76 in the primary department, representing thirteen States and Ireland. The degree of Bachelor of Arts was conferred on six graduates at the close of the year. They report that the work of instruction has gone forward essentially as in former years and that the students and pupils have shown commendable diligence.

A new school building has been completed and a laboratory and shop building is now under construction, which will provide enlarged facilities for industrial education.

FINANCIAL STATEMENT.**Current expenses:**

Appropriated	\$55,000 00
Expended	55,000 00

Buildings and grounds:

Appropriated	17,000 00
Expended	17,000 00

EDUCATION OF THE BLIND AND FEEBLE-MINDED CHILDREN.

Under section 4869 of the Revised Statutes and the act of June 16, 1880, respectively, the Secretary of the Interior is authorized to cause the indigent blind and the feeble-minded of teachable age, belonging to the District of Columbia, to be instructed in some State institution at a cost not greater than that paid by such State for similar instruction. In pursuance of this authority, ten blind persons were under instruction at the close of the year at the Maryland Institution for the Blind at Baltimore, and eight feeble-minded children were at the Pennsylvania Training School for Feeble-minded Children at Elwyn, Penn. The amount charged for instruction at these institutions is \$300 per year for each person.

Payment for the instruction of the blind is provided for in the "permanent annual appropriation" for that purpose. Prior to January 1, 1885, the appropriation for educating the feeble-minded was included in the amount annually appropriated for the support of the Columbia Institution for the Deaf and Dumb. At the last session of Congress a separate appropriation was made for this purpose, to cover the deficiency since January 1, 1885, and also an appropriation of \$2,500 for the fiscal year ending June 30, 1887. This will provide for the expenses of the number now in the institution. The Department has recently been obliged to refuse admission to four applicants for the benefits of the statute, the available appropriation not being sufficient to provide for any addition to the number now under instruction.

THE TERRITORIES.

The general condition of the Territories shows marked and, in some instances, striking progress in population, taxable property, settlement of land, education, the mechanic arts, railroad enterprises, and many other of the elements which promise to make them great and prosperous States in the future.

The population of the Territory of Dakota for the year ended June 30, 1886, is estimated at 500,000, an increase during the year of 85,000. The present population of Montana is given at 110,000, and that of Idaho at 85,000, an increase of nearly 10,000 in each of these Territories during the year. Washington Territory now claims a population of 210,000.

In all the Territories the progress of settlement, as shown by the entry and purchase of lands, has been marked and rapid. In Dakota the quantity of land purchased from all sources by immigrants is estimated to aggregate 4,000,000 of acres, an area larger than that of the States of Connecticut and Rhode Island. One million four hundred and four thousand three hundred acres were acquired from the Government in this Territory alone under the homestead and pre-emption acts during the year, and 12,316 acres were located by land-scrip. Claims initiated under the three general land laws were: Homesteads, 7,466; pre-emptions, 7,894; and timber-culture claims, 7,071.

The past year was not a favorable one for agriculture in the Territories. In Dakota and Montana scarcely more than half a crop was realized, and from those portions of the southern Territories where irrigation has not been resorted to similar reports have been received. The farmers in many of the Territories have, however, done fairly well, because of the introduction of a greater variety of crops, and especially because of the large attention given to stock-raising. Cattle in the hands of numerous holders of small herds have been found very profitable, notably in Dakota.

The immense herds of Montana have, however, almost exhausted the pastures of that Territory. Owners of large numbers of cattle have been compelled in some instances to seek pasturage in the British possessions, and it is thought that the Territory has reached the limit of safe production under the system of large herds. The governor estimates that there are now pastured in Montana 1,500,000 head of cattle, 130,000 horses, and 2,000,000 sheep. In Idaho there are 500,000 head of cattle and horses and 250,000 sheep.

The low price of silver and copper has somewhat affected the production of those metals. In Arizona the yield is estimated at, gold, \$1,000,000; silver, \$7,500,000; a considerable falling off from the preceding year. Montana reports the gross value of the products of her mines for the year at \$3,450,000 gold, \$9,600,000 silver, \$8,000,000 copper, and \$1,250,000 lead. The product of the mines of Idaho is given

by the United States Assayer as follows: Gold, \$1,338,686; silver, \$3,027,316; lead, \$639,069. The discovery of iron ore assaying 65 per cent. is reported in Washington Territory. Coal-mining has become a very important industry on Puget Sound. Over 1,000,000 tons have been taken from a single mine near Seattle within the past seven years. Mining properties in all the Territories, which have remained in the past undeveloped or unprofitable for want of adequate transportation, are becoming valuable as railroads are extended into their neighborhood.

The subject of popular education has already received great attention in the Territories. In number of schools, aggregate annual expenditure for school purposes and value of permanent school property, Dakota, for instance, is in advance of many of the States of the Union; and Arizona claims to have expended a greater sum per capita on children enrolled in the public schools than any other State or Territory.

The status of school lands in the Territories should be fixed by legislation. Thousands of acres of these lands have been farmed for years by settlers who can obtain no title to them. The Territories are not authorized either to sell or to receive rents for these lands, as the title remains in the United States.

The development of the Territories during the year has been impeded by the Apache raids in Arizona and New Mexico, by Chinese labor troubles in the northwest, and by Mormon troubles in Utah and Idaho. This last subject is treated more in detail in the resumé given on another page of the reports of the Utah Commission, and of the governor of Utah.

In Idaho, and especially in Washington Territory, the presence of Chinese laborers who do not seek to make permanent homes or to identify themselves with the interests of the people, has been a source of disturbance. Your attention is particularly invited to that portion of the report of the governor of Washington Territory relating to this subject, and to the official correspondence printed as an appendix thereto, which set forth in full the extraordinary measures to which the Executive was compelled to resort in order to protect the lives and property of Chinese residents.

There is a general appeal from the Territories for national aid in developing their material resources. In the forests of Western Washington the pastures and grain farms of the central plains, the diversified and semi-tropical products of irrigated lands in Arizona and New Mexico, and the rich mines of all the Territories, the nation possesses a noble heritage. The care and management of this, our sole remaining public estate, is well worthy of the most thoughtful attention.

The present condition of the Territories presents many questions of wide interest and of general concern. If the mountainous regions about the fountain heads of our great continental rivers should be denuded of timber, alternate floods and low water, affecting a great extent of country, would probably result. The intelligent care of the forest

growth of the Territories in such a way as to permit its necessary use by the people, and, at the same time, prevent its wanton destruction, is therefore a question of much more than local importance. The establishment, under suitable regulations, of a great timber reservation in Montana and Idaho has already been brought to the attention of Congress, and perhaps would be of practical value in connection with the work now being carried on at Lake Winnebago.

It is urged that the system of irrigation necessary to render immense areas of fertile land in the Territories inhabitable is impossible to small holders; that the sinking of artesian wells, the construction of extensive reservoirs and irrigating ditches many miles in length, must be done by accumulated capital, and that, therefore, in the development of the Territories large masses of land must be brought under a single management.

Your earnest attention is invited to this subject, and it is suggested that rather than abandon the policy of numerous small holdings, which has received the general sanction of the American people, the National Government should itself undertake preliminary scientific investigations, and, perhaps, the conduct of a system of public works having for their object the establishment in the Territories of a numerous wealth-producing population. The American policy of placing the lands in the hands of the people in small parcels will develop much more effectually the varied resources of the Territories than any system of large ranches and great estates, and at the same time will furnish homes, under the dignity of individual proprietorship, to many millions of people.

The report of the governor of Alaska not having reached this office until near the completion of my report, I defer the subject for a future communication.

THE UTAH COMMISSION.

The chairman of this Commission reports that, in general, during the past year, as in the last and previous years, the law relating to the disfranchisement of polygamists and those living in unlawful cohabitation has been fully and successfully enforced. All such persons, with very few, if any, exceptions, have been excluded from voting and holding office. During this period, as in the preceding year, criminal prosecutions for violations of the law of Congress have been numerous. The Commission say that whether, upon the whole, polygamous marriages are on the decrease in Utah is a matter on which different opinions are expressed; but undoubtedly many persons have been restrained by the fear of disfranchisement and the penitentiary, and they think it safe to say that in the more enlightened portions of the Territory, as, for example, Salt Lake City and its vicinity, very few polygamous marriages have occurred within the last year, while in the more remote counties there is reason to believe that such violations of the law are not infrequent.

In the opinion of the Commission, the bill now pending in the House, as it was amended by the Senate and by the Judiciary Committee of the House, furnishes a comprehensive plan for the treatment of public affairs in Utah, and they urge its passage at the approaching session. They also recommend legislation forbidding the immigration into the United States of aliens who are polygamists, and they favor the adoption of the constitutional amendment proposed by the Judiciary Committees of the two Houses of Congress, "which would serve as an advertisement to the people of all civilized nations, that in the United States polygamy has been put under a ban in the most authoritative and emphatic manner, so that the most ignorant of the deluded immigrants might reasonably be expected to take cognizance of the constitutional inhibition and the consequence of violating the laws."

The governor of Utah, in his annual report, gives the following statement in reference to convictions under the Edmunds law:

From July 1, 1884, to June 30, 1885, 9 convictions were had, 3 for polygamy and 6 for unlawful cohabitation, 8 of whom resided in Salt Lake and 1 in Beaver County. From July 1, 1885, to June 30, 1886, there were 84 convictions, 3 for polygamy and 81 for unlawful cohabitation, making a total of 93 convictions. In the 16 counties in which no convictions have been had the Mormon population is largely in the ascendancy and it is known that the population in those counties believe and practice polygamy as well as their brothers in the other counties.

In the district court, held at Salt Lake City, there are 123 indictments pending, 115 against citizens residing in Salt Lake, 7 from Tooele, and 1 from Davis County. The clerk of the court says as to these indictments:

"In a large number of these cases the defendants are at large, it not having been possible to arrest them."

It has been and continues to be the custom of the court, after conviction, to suspend the judgment and allow the convicted party to go free, upon his simple promise that he will in the future obey the laws. Of the number convicted up to the 30th of June, 1886, but seven have given the promise and accepted freedom.

In conclusion the governor says:

The all-absorbing question in Utah Territory, hurtfully affecting its prosperity, impeding its advancement, and disturbing the quiet and happiness of its people, is the attitude of defiance assumed by the Mormon people to the law of Congress for the suppression of polygamy. In all questions affecting the Mormon church and people the polygamous and monogamous Mormons make common cause, stand together, and are united. They maintain publicly through their leaders and teachers, in their houses of worship, through their press, and privately in social and business circles, that the law is infamous, an interference with and a denial to them of that religious freedom guaranteed to all by the Constitution; of their right and religious duty to continue in violation of the law their polygamous relations; and they deny the authority of Congress to regulate and interpose any restrictions as to the marital relation; that the obedience which they owe and will cheerfully render to a power higher than any earthly power compels them to exercise their religious rights and privileges in the place of and in violation of the law; that they are prepared to, and will if required of them, sacrifice their personal comfort, their property, suffer indefinite imprisonment, and surrender life itself rather than yield and promise obedience to the law.

HOT SPRINGS RESERVATION, ARKANSAS.

The work authorized by the appropriation of \$8,000 in the act of March 3, 1885, "to complete the improvement of Hot Springs Creek down to the southern boundary of the reservation and across Reserve avenue," has been finished, except some filling between the reservation line and east wall of culvert, and proposals have been asked, by advertisement, for the work to be done under the further appropriation (\$20,000) contained in the act of August 4, 1886. Before this report is submitted it is expected that a contract will be made for this work, the specifications of which will require its completion within four months.

During the past year the hot-water springs of low altitude upon the reservation have been secured by walling around them with masonry, and the water therefrom collected into iron pipes. At present this volume of hot water, estimated at 300,000 gallons per day, and constituting the greater part of the whole supply of hot water from the reservation, cannot be utilized for bathing purposes, as the springs from which it is derived are not sufficiently elevated to permit of its flowing by gravitation into the bath-houses. Some means should be provided for bringing into use this water which now runs to waste, as the supply now available is at times insufficient to meet the demand for hot water in the bath-houses and the Army and Navy Hospital. A plan by which this could be accomplished, based upon the recommendation of a committee of the House of Representatives which visited Hot Springs in March, 1884, was suggested in my last annual report. The plan embraces a system of reservoirs and machinery for pumping the water to an elevation on the reservation from which it could be distributed to the bath-houses. It is estimated that this would involve an expense of \$31,000, and I renew my recommendation heretofore made to Congress that an appropriation of that amount be made for the purpose indicated.

As stated in my last annual report, the leases of all the sites on the reservation upon which bath-houses have been erected expired December 15, 1883. These leases were granted in pursuance of authority conferred upon the Secretary of the Interior by act of December 16, 1878, and the term of five years (specified in the statute) was commenced from the date of approval of the act. Upon consideration of applications for renewal of the expired leases a question arose as to whether the law contemplated such renewal, which was submitted to the Attorney-General, who, under date of October 12, 1886, expressed the opinion that authority for such renewal is conferred by the act of 1878. Accordingly one of the leases—of the site occupied by the Rammelsburg bath-house—was renewed January 16, 1886, for five years from December 16, 1883. Before action was taken in the other cases a concurrent resolution was introduced in the Senate (January 21, 1886) reciting the facts of the expiration of the leases and of the proposed renewals in accordance with

the opinion of the Attorney-General, and declaring it to be the opinion of Congress that the leases should not be renewed "until proper legislation is had with reference thereto." This resolution, amended to read that the leases should not be renewed "unless the Forty-ninth Congress shall adjourn without having legislated with reference thereto," was passed by the Senate February 25, 1886. In deference thereto no further action has been taken in respect to the renewal of the leases.

The water-rent has been paid regularly by the lessees, so that the income from the reservation has not been affected by the uncertainty. There has been, however, an evident and perhaps, under the circumstances, an excusable indisposition on the part of those who control the bath-houses to incur the expense of repairs necessary to the convenience and comfort of the invalids who patronize the baths. It is certainly due to the public as well as to those who conduct the bath-houses that this state of affairs should no longer continue; and if no legislation to the contrary is perfected at the approaching session of Congress the leases will be renewed for five years, commencing from the expiration of the original leases.

In addition to the leases above referred to, five other bath-house sites upon the permanent reservation have been leased for terms of five years from June 1, June 12, and August 1, 1883, January 1, 1884, and December 18, 1885, respectively.

I shall take occasion at an early day to submit recommendations touching legislation by Congress for the future control and management of this reservation.

FINANCIAL STATEMENT.

Protection and improvement:	
Balance July 1, 1885.....	\$22, 053 45
Appropriated	9, 701 65
	<hr/>
	31, 755 30
Expended	23, 252 28
	<hr/>
Balance	8, 503 02

THE YELLOWSTONE NATIONAL PARK.

In my last annual report I adverted to the wise and beneficent legislation of 1872 establishing the Yellowstone National Park, in the interest of science and the education and pleasure of the people, as well as for the preservation of the wonderful natural curiosities existing within the reservation, and such specimens of the animals once so common in our Western forests and mountain fastnesses as still find shelter in this land of nature. I also referred to the marvelous attractions within its bounds, which have excited the interest and curiosity of intelligent people throughout the civilized world, and have made it a favorite resort, during the brief season of accessibility, not only of Americans, but the sight-seers and scientists of all countries and climes.

The interest manifested in the natural scenery and phenomena of this "Wonder Land," which induced Congress, in 1872, to segregate it from the public domain, to be reserved in common heritage as a national park, has in no degree abated, but, on the contrary, is increasing from year to year as its wonders become better known to those who combine pleasure-seeking with scientific research.

I again invite attention to the reasons urged in my last annual report why this Park should still be preserved in as nearly a state of nature as possible, in the interest of science and as a pleasure ground for the people of the whole country.

On the 20th of March last a lease was made by the Department granting Mr. Charles Gibson, of Saint Louis, Mo., hotel sites at Mammoth Hot Springs, Norris Geyser Basin, Grand Cañon, and Yellowstone Lake, seven acres in all, together with the privilege of furnishing transportation and other necessary accommodations for visitors. Under this lease operations were begun immediately after its execution, and the additional facilities thus provided were enjoyed by many tourists during the season just passed. By a reduction of the fares upon the railway lines by which the Park is reached, the cost of visiting it has been brought within the means of a larger number, and the visitors during the past season were more numerous than in any previous year. Over 5,000 registered at the hotels, nearly 1,000 of these being members of the Grand Army of the Republic.

This enormous travel shows that the Park has become in every sense a national one, and that it has taken a firm hold upon the affections of the people, and not to preserve it for the purpose for which it was originally intended would in my judgment be an error, regretted and condemned throughout the civilized world. But even regarded in a utilitarian sense, it has been demonstrated by the reports of men of the highest scientific repute and by the observation of mankind, that the conservation of the Park is highly necessary in order to preserve the forests which cover a large part of its area and serve the important function and economic end of regulating and equalizing the precipitation of moisture and retaining the snows whereby the streams are fed.

That a more satisfactory condition of affairs exists there since the granting of the lease is evidenced by the fact that no complaint from any visitor has reached the Department.

From the report of Superintendent Wear I learn that there is more game of every kind in the Park now than ever before. Elk, antelope, deer, and mountain sheep are there in large herds, and within less than four miles of the Mammoth Hot Springs. By a vigorous enforcement of the regulations of the Park he has been enabled to stop the wholesale slaughter of game that has at times been carried on. He has been greatly aided in this work by the men who were under his charge as assistants. They were inured to the country, skillful guides and woods-

men, and were appointed simply on account of their qualifications for the work to be done.

To the surprise of the friends of the Park, Congress at its last session failed to make appropriations for the pay of the superintendent and his assistants. The effect of this was to compel me to ask for a detail of troops from the War Department, under the provisions of the act of March 3, 1883, which provides that—

The Secretary of War, upon the request of the Secretary of the Interior, is hereby authorized and directed to make the necessary detail of troops to prevent trespasses or intruders from entering the Park for the purpose of destroying the game or objects of curiosity therein, or for any other purpose prohibited by law, and to remove such person from the Park if found therein.

Upon this request the Secretary of War ordered Company M, First United States Cavalry, Capt. Moses Harris commanding, to the Park for the purpose indicated.

It is a high tribute to the efficiency of the superseded civil force that one of the first acts of Captain Harris was to ask the Secretary of War for authority to employ as scouts a number of the assistants who had been appointed by this Department, in order to enable the soldiers to acquire a knowledge of the country. He received authority, however, to employ but one of them on this duty.

It will necessarily require considerable time to enable the soldiers on duty there to acquire such a knowledge of the country as will be essential to efficient work in the preservation of the game. Without a thorough knowledge of the country the force of soldiers can give but little protection to the game now in the Park. No matter how efficient the officer in command may be, it will be difficult for him to give such protection to the game as is desired and intended without the aid of skilled and tried men whose training and duties have been such as qualify them for this peculiar service.

I urgently renew my recommendation that provision be made for a superintendent, as heretofore, and fifteen assistants instead of ten, the larger number being required for the proper protection of the Park.

During the past year a number of hunters were captured and their outfits confiscated—the only punishment (in the absence of any law providing a penalty for the offense) to which they could be subjected.

The difficulty in effectually stopping the slaughter of game will be appreciated when it is considered that numerous hunters, trappers, and “squaw men” frequent the vicinity of the Park, and, as game diminishes outside, resort to every stratagem to reach that which we endeavor to protect within its borders. There is reason to believe that many of the fires which have burned over a considerable area of the Park during the past summer were started by these men, in order to drive the game within their reach. Most of these fires have started along the traveled road between Gardiner and the Clark’s Fork mining camp, and were probably due to the failure of teamsters to extinguish their camp-fires.

In my last annual report I directed the attention of Congress to the

Inadequacy of the means provided by law for enforcing the regulations made for the protection of the Park, and I then recommended the establishment of a court clothed with jurisdiction over the subject. Measures were introduced in the last Congress having that object in view, but none of them became laws. As has been shown, the Wyoming law which provided for jurisdiction over the Park, and which established justices of the peace within its limits, was repealed by the Territorial legislature. While the acts of Congress confide the care and control of the Park to the Secretary of the Interior, and confer upon him the power to make rules and regulations, no penalties are provided for their violation, nor is it clear where the jurisdiction over crimes committed within the Park resides. For all practical purposes it is a Government reservation, and the laws of the United States governing such reservations should be extended over it. It is certainly unfair that the people shall be invited into a park set aside for their benefit and enjoyment by the national laws, and yet find when they reach it no adequate protection for their persons or property.

The bill unanimously reported from the Committee on Territories of the Senate during the last session of Congress I believe to be well constituted for the object in view. It provides penalties for violation of the rules made by the Secretary of the Interior and others, and for the appointment of a magistrate to be located in the Park for the trial of offenders. This, or some similar measure, should become a law during the present Congress if it is proposed to preserve this Park for the purposes covered by the original act.

The work on the roads through the Park has been greatly impeded by the fact that the appropriations for the present year were not available until late in August. The amount of the appropriation was \$20,000, being \$3,000 less than the sum appropriated for roads and bridges, during the preceding year. This appropriation is wholly inadequate, and I recommend that the same amount indicated in my last annual report (\$100,000), as necessary for the construction of roads and bridges, be appropriated for the coming fiscal year. This amount the engineer in charge thinks necessary to make the chief objects of interest in the Park accessible to the visitors.

From all the reports that have reached me, I am satisfied that Captain Kingman, the engineer officer in charge, has accomplished much with the small means at his command, in the improvement of the roadways in the Park; and the work has received the commendation of every visitor.

Greatly improved accommodations for visitors have been afforded under the new lease. The association representing the authority of Mr. Gibson, though furnishing better accommodations than have hitherto been known in the Park, have not erected all the buildings that were contemplated when the lease was made to him, owing to the shortness of the season in which work can be successfully carried on in that region.

During the last session of Congress a communication was addressed to me by the chairman of the Committee on Territories of the Senate, requesting my opinion respecting a bill that had been introduced proposing to grant the right of way through a portion of the Park by the construction of a railroad, in answer to which, under date of April 22, 1886, I gave such reasons as my judgment approved in opposition to the proposed franchise. I believed then, and now believe, that it is not consistent with the purposes for which the Park was set apart to permit any railroad within its limits. I then endeavored to show that the dominant idea of Congress in reference to the matter has been the preservation of the wilderness of forests, geysers, mountains, &c., and the game common to that region in as nearly the condition of nature as possible, with a view to holding for the benefit of those who shall come after us something of the original "wild West" that shall stand while the rest of the world moves, affording to the student of nature and the pleasure tourist a restful contrast to the busy and progressive scenes that the story of the past of American enterprise gives assurance will ere long be repeated in the growth in population and civilizing influences of the Territories of Idaho, Wyoming, and Montana, that now border the Park, and that even now are aspiring to the dignity of Statehood.

I did not and do not believe that the ordinary interests which are said to be affected by the enterprise, and to demand the railroad connection asked for, are of sufficient importance to justify this encroachment upon the Park reservation. If such interests demand the construction of a railway, I believe some practical route can be found over which it can be built without entering the Park.

I then suggested the wisdom of certain restrictive amendments for the consideration of Congress, in case the railway should be authorized and the right of way granted which I deemed important, but these suggestions were only made as a matter of protection in the event Congress should differ from me and authorize the construction of the road. They were not intended as waivers of my objections to the construction of a road in the Park on any terms, or with any conditions. I firmly believe that the building of this road will be but the beginning of the ultimate abandonment of the original idea that influenced Congress in making this reservation.

I accompanied that letter with certain communications from persons of the highest repute and standing, and who are without personal interest in the matter, showing that there is no pressing interest in existence which requires the construction of the road, and if there were, that other routes can be found upon which such a road can be constructed. I therefore earnestly recommend that authority for the building of a railroad through the Park be denied.

ESTIMATES FOR NEXT FISCAL YEAR.

For pay of superintendent.....	\$3,500 00
For pay of 15 assistant superintendents, at \$1,000 each	15,000 00
For pay of one secretary.....	1,500 00
Incidental expenses.....	7,500 00
For headquarters building, and other buildings for Government use.....	10,000 00
For suitable stables and sheds for use of Government stock.....	2,500 00
For extinguishment of claims prior to the dedication of the Park, or as much thereof as may be awarded by a duly constituted commission appointed by the Secretary of the Interior	5,000 00
For the erection of telephone wires for use of the officers of the Park	5,000 00
For the construction of roads and bridges.....	100,000 00
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	150,000 00
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FINANCIAL STATEMENT.

Protection and improvement:

Appropriated	\$40,000 00
Expended	39,526 96

Balance	473 04
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Very respectfully,

L. Q. C. LAMAR,
Secretary.

The PRESIDENT.

P A P E R S
ACCOMPANYING
REPORT OF THE SECRETARY OF THE INTERIOR

REPORT OF THE COMMISSIONER OF INDIAN AFFAIRS.

**DEPARTMENT OF THE INTERIOR,
OFFICE OF INDIAN AFFAIRS,
Washington, September 28, 1886.**

SIR: I have the honor herewith to submit the second annual report on Indian affairs under their present management.

It is with pleasure that you, and through you Congress and the American people, are invited to mark the unmistakable evidences of progress made by many of the tribes within the last twelve months. These evidences are apparent from several standpoints. The excellent temper, subordination, and general tranquillity which, with two or three exceptions, have everywhere prevailed among the Red Men under the charge of the Indian Bureau are of themselves a most auspicious omen of progress. The active inquiry among many of the tribes for further knowledge of the arts of agriculture; the growing desire to take lands in severalty; the urgent demand for agricultural implements with modern improvements; the largely increased acreage which the Indians have put to tillage, exceeding that of any preceding year; the unprecedented increase in the number of Indian children who have been enrolled in the schools—these and many other facts fully establish the claim that during the past year the Indian race has taken a firmer step and a grander stride in the great march toward civilization than ever before in the same length of time.

THE "PEACE POLICY" AND ITS ECONOMY.

Another year's experience and practical trial of this "humanitarian and peace system" only adds cumulative testimony to the superiority of its methods of Indian civilization over any others ever yet tried. As a further and unerring evidence, I may refer to the fact that the progress above noted has been made without corresponding increase in expenditures. In fact the estimates for carrying on the Indian service are being reduced, as the following statement shows:

Estimate for appropriation:

Fiscal year 1886	\$7,328,049 64
Fiscal year 1887	6,051,259 84
Fiscal year 1888	5,608,873 64

In the estimates for 1888 an increase of \$177,500 is asked for educational work. But for this increase the reduction would have been much greater, and the estimate for 1888 would have fallen below the estimate for 1887 \$619,886.20, and below the estimate for 1886 \$1,896,676.

A benign policy on the part of the Government toward the Indian race, dictated by a love of humanity, one in which both political parties have fortunately and exceptionally agreed, is a proud national distinction. It speaks well for the great heart of the people which lies back of and behind this Government that they order and command their representatives to foster a policy which alone can save the aborigines from destruction—from being worn away by the attrition of the conflicting elements of Anglo-Saxon civilization. Upon my induction into office I gave to this line of administration mature reflection, critical research, and extensive consultation, and in my last annual report it was briefly summarized, as follows, and its continuance urged:

This brings me directly to the consideration of the practical policy which I believe should be adopted by Congress and the Government in the management of the Indians. It should be industriously and gravely impressed upon them that they must abandon their tribal relations and take lands in severalty, as the corner-stone of their complete success in agriculture, which means self-support, personal independence, and material thrift. The Government should, however, in order to protect them, retain the right to their lands in trust for twenty-five years or longer, but issue trust patents at once to such Indians as have taken individual holdings. When the Indians have taken their lands in severalty in sufficient quantities (and the number of acres in each holding may and should vary in different localities according to fertility, productiveness, climatic, and other advantages), then having due regard to the immediate and early future needs of the Indians, the remaining lands of their reservations should be purchased by the Government and opened to homestead entry at 50 or 75 cents per acre. The money paid by the Government for their lands should be held in trust in 5 per cent. bonds, to be invested as Congress may provide, for the education, civilization, and material development and advancement of the red race, reserving for each tribe its own money.

When the farm and the school have become familiar institutions among the Indians, and reasonable time has intervened for the transition from barbarism or a semi-civilized state to one of civilization, then will the Indian be prepared to take upon himself the higher and more responsible duties and privileges which appertain to American citizenship. A wider and better knowledge of the English language among them is essential to their comprehension of the duties and obligations of citizenship. At this time but few of the adult population can speak a word of English, but with the efforts now being made by the Government and by religious and philanthropic associations and individuals, especially in the Eastern States, with the missionary and the schoolmaster industriously in the field everywhere among the tribes, it is to be hoped, and it is confidently believed, that among the next generation of Indians the English language will be sufficiently spoken and used to enable them to become acquainted with the laws, customs, and institutions of our country, and to regulate their conduct in obedience to its authority.

The willing support which the entire people of the United States are giving to this policy of educating the Indian and placing him upon a homestead with the peaceful implements of agriculture and the mechanic arts in his hands, and the assiduity with which for years the authorities have worked for the accomplishment of this object with varying success among different tribes in all sections of the country in which they are located, and the onward move in this direction now urged and impelled by every agency and instrumentality of the Indian Bureau, as well as by the numerous organizations and societies of various kinds which are all working in harmonious co-operation for the effectuation of this noble purpose, should arrest the attention of these benighted people, and these beneficent endeavors should evoke from their stolid hearts gratitude and kindly appreciation. I am glad to know that in very many instances such appreciation is not wanting.

THE "FIVE CIVILIZED TRIBES."

In view of this policy of protection for the Indians, it is reasonable that the Indian Bureau and the country should look to the five civilized tribes of the Indian Territory about whom so much has been said by

orators and statesmen, and of whom so much is expected by the friends of the Indian, to set freely and promptly such an example as shall advance the civilization of their savage brethren of other tribes. The influence of their example upon the semi-civilized and savage tribes makes the study of their condition and methods a matter not only of great interest but also of first importance.

The treaties of 1866, and other treaties also, guarantee to the five civilized tribes the possession of their lands; but, without the moral and physical power which is represented by the Army of the United States, what are these treaties worth as a protection against the rapacious greed of the homeless people of the States who seek homesteads within the borders of the Indian Territory? If the protecting power of this Government were withdrawn for thirty days, where would the treaties be, and the laws of the Indians and the Indians themselves? The history of Payne and Couch and their followers, and the determined effort of both Republican and Democratic administrations to resist their unlawful claims and demands, is too recent not to be still fresh in the memory of these Indians. It is not reasonable to expect that the Government will never tire of menacing its own people with its own Army. Therefore it becomes vastly important that these five civilized tribes, who have among them men competent to be Representatives and Senators in Congress, governors of States, and judges on the bench, should cordially, and in a spirit of friendly gratitude for what has been done for them, co-operate with the Government in bringing about such a change of affairs in their midst as will bring peace and quiet to their borders, settle existing agitations as to their rights and interests, and dispose of disquieting questions which will surely grow out of the present alarming condition of things in the whole Indian Territory.

At present the rich Indians who cultivate tribal lands pay no rent to the poorer and more unfortunate of their race, although they are equal owners of the soil. The rich men have too large homesteads and control many times more than their share of the land. It will not do to say, as the wealthy and influential leaders of the nations contend, that their system of laws gives to every individual member of the tribe equal facilities to be independent and equal opportunity to possess himself of a homestead. Already the rich and choice lands are appropriated by those most enterprising and self-seeking. A considerable number of Indians have in cultivation farms exceeding 1,000 acres in extent, and a still larger number are cultivating between 500 and 1,000 acres. Now, think of one Indian having a farm fenced in of 1,000 acres, with the right, according to their system (as I understand the fact to be), of adding nearly 1,000 acres more by excluding all others from the use or occupancy of a quarter of a mile in width all around the tract fenced. What a baronial estate! In theory the lands are held in common under the tribal relation, and are equally owned by each member of the tribe, but in point of fact they are simply held in the grasping hand of moneyed monopolists and powerful and influential leaders and politicians, who pay no rental to the other members of the tribe, who, under their tribal ownership in common, have equal rights with the occupants.

A case of this sort came under my personal observation on a visit to the Creek Nation in 1885. I was credibly informed that one of the Creeks had under fence over 1,000 acres, and, of course, under their laws and usages, he had the right to exclude all other members of the tribe from claiming any land embraced within the limits of a quarter of a mile in width surrounding the inclosed farm of 1,000 acres, provided he made the first location. This estate was handsomely managed, with

many modern methods and improvements. A costly residence stood upon it and large commodious barns, stables, &c., were provided. The owner cultivated this farm with laborers hired among his own race—perhaps his own kith and kin—at \$16 per month, and they lived in huts and cabins on the place without a month's provisions ahead for themselves and families. They owned, of course, their tribal interest in the land, but the proceeds of the valuable crops which were raised by their labor swelled the plethoric pockets of the proprietor. In this instance the crops grown, in addition to large quantities of hay, consisted of 25,000 bushels of corn, fattening for market 200 head of beef cattle and 300 head of hogs. The proprietor grows annually richer, while the laborers, his own race, joint owners of the soil, even of the lands that he claims and individually appropriates, grow annually and daily poorer and less able to assert their equal ownership and tribal claim and, shall I say, constitutional privilege and treaty rights.

Now this condition of semi-slavery, shall I call it, exists in each of the five civilized nations, and grows directly out of the holding of lands in common, and is necessarily inherent in this system of tenantry. Agent Owen, in his report, says:

The Washita Valley in the Chickasaw Nation is almost a solid farm for 50 miles. It is cultivated by white labor largely, with Chickasaw landlords. I saw one farm there said to contain 8,000 acres, another 4,000, and many other large and handsome places.

I have endeavored to obtain some reliable data as to the number of farms containing 1,000 acres which exist in the five tribes. It did not occur to me that eight times that amount of rich valley land had been appropriated by one proprietor, that another owner had 4,000 acres, and that there were "many other very large and handsome places" in the same valley, each owned by individual proprietors, but all being tribal lands. A system of laws and customs, where tribal relations exist and lands are owned in common, which permits one Indian to own so large a quantity of land, to the exclusion of all other Indians, merely because he was first to occupy it or because he inherited it from his father who occupied it originally, when all other Indians have equal tribal rights with the happy and fortunate possessor, needs radical reformation. Are these the sacred rights secured by treaty, which the United States are pledged to respect and defend? If so, then the United States are pledged to uphold and maintain a stupendous land monopoly and aristocracy that finds no parallel in this country except in two or three localities in the far West; and in these instances it may be said that the titles are clear (having been obtained by purchase from the Government), however questionable may be the policy which makes it possible for one man to own unlimited quantities of land.

How many Indians who have been less provident than these gentlemen who have been shrewd enough to fence up thousands of acres in one farm, and whose claim extends a quarter of a mile in width around the already mammoth estate, are eking out a miserable existence upon some barren homestead, or, worse still, are living by sufferance as day laborers on these large estates, although they own their tribal share of these lands which they are too poor, weak, and powerless to secure or demand! I have no documentary statistics from which I can form an accurate idea of the proportion of the population in the several nations who are hiring day-laborers; but I have been personally informed by very intelligent resident citizens that the ratio of this class in the Cherokee Nation, including those who cultivate less than five acres, is one-sixth of the whole; among the Choctaws, Chickasaws, and Creeks about one-

fourth; and that among the Seminoles the ratio is even larger. So it is clear that a large part of the population in each of these nations—held down below the common level of their own race by stress of poverty and the weight of daily necessities, unable by reason of present misfortunes to avail themselves of any opportunity or means to possess themselves of their equal distributive shares of lands, and to so utilize them as to place their families upon a higher social and financial plane—needs some potent influence or power to dispel this system and establish a new order of things—in a word, to raise up the down-trodden people to their proper level.

It is undeniable that the five civilized tribes look to the Indian Office, under the intercourse laws, only for protection from the aggression of white intrusion. In no other particular do they respect or consult the authority of the Government. The United States Army has stood guard over these Indians for fifty years, shielding and protecting them from the grasp of the frontiersman and the settler. Yet they have not seconded the endeavors of the Government to induce among the various tribes a general spirit of taking allotments by setting the example themselves. This does not seem a grateful remembrance of the sacrifices the American people have made for their protection, in submitting to an annual tax of many millions of dollars to support and maintain an Army, without which the Indian Territory would have been reckoned long ago among the things that were.

Allotments.—The following table shows the amount of land held by each of the five civilized tribes in the Indian Territory, and the amount to which each individual would be entitled were the lands of his tribe equally divided and allotted in severalty:

	Acres.	Population	Acres to each individual.
Cherokees*.....	5,031,351	22,000	228
Creeks.....	2,040,495	14,000	217
Chickasaws.....	4,550,945	6,000	758
Choctaws.....	9,628,000	16,000	601
Seminoles.....	875,000	2,000	125

* Exclusive of lands west of the Arkansas River.

The foregoing table demonstrates the fact that if in each of the five nations each head of a family and each adult person should be allowed 160 acres, and each minor child 80 acres, there would still remain a large surplus of unallotted land. The practical proposition which it seems to me would be best for these Indians would be to divide their lands in severalty upon the basis I have suggested, or upon some other reasonable basis, and to sell the remainder to actual settlers at a fair and just price. The proceeds of the sales of these surplus lands would enable the very poor of whom I have spoken and for whom I plead—the laborers at \$16 per month—to fence and improve their allotments, erect buildings and barns, set out orchards, and prepare themselves to live as they are entitled to live, owning as they do lands sufficient for homesteads for every one. There would also be sufficient funds to put up suitable school buildings and establish good permanent schools in every settlement or district. If this course is pursued it will secure to every Indian a homestead, which he can define and claim absolutely as his own. One which he can improve and adorn; where he can build his house and plant his vines; where his children can be born and reared, and where they may be buried; a homestead

which by reasonable labor will secure an ample support for each Indian who now wanders around as a day laborer, with no definite knowledge of where his home is located, and who, although entitled to a home by reason of a common ownership in the lands, is now too poor and weak and ignorant to demand and secure his rights. This class of poor Indians needs to be raised up by the adoption of the policy here forshadowed.

By the fifteenth article of the Cherokee treaty of 1866 (14 Stat., page 803) it is provided that—

The United States may settle any civilized Indians, friendly with the Cherokees and adjacent tribes, within the Cherokee country, on unoccupied lands east of 96°, on such terms as may be agreed upon by any such tribe and the Cherokees subject to the approval of the President of the United States.

This treaty further provides that the Indians who may thus be settled among the Cherokees are to have a district of country, set off for their use by metes and bounds, equal to 160 acres for each member of said tribes, at a price to be agreed upon, provided the consent of the Cherokee Nation is first obtained prior to such settlement. Here 160 acres is made the basis of the homestead. I believe that, except in a few cases covered by specific treaty stipulations, such as the Omahas, Sioux, and Yakamas, allotments made to Indians by the Government have not exceeded 160 acres to an Indian. The quarter-section is universally recognized by the Government as the limit of the homestead; 160 acres is the recognized standard number. But I would not confine the members of the five civilized tribes to 160 acres. I only think that all lands in those nations should be divided in severalty equally among the population, so that those members of the tribes who now stand mutely by and see members of their own race occupy and cultivate their lands and pocket the proceeds may be put in actual possession of that which belongs to them.

I shall refer, hereafter, to the untold ills among the five civilized tribes, caused by the want of courts having jurisdiction over all crimes committed by all persons. But before taking up that subject I desire to reiterate that the full and complete remedy for the numerous evils that afflict those people lies deeper than the incomplete system of judicature which prevails within their limits. These people have, in a great measure, passed from a state of barbarism and savagery. Many of them are educated people. They have fine schools and churches. They are engaged in lucrative business of various kinds. In fact, so far as outward appearances go, there would seem to be very little difference between their civilization and that of the States. And yet when we come closely to investigate the laws and customs of their system of government, it is radically different from that of any of our States. Nowhere in the United States, except in polygamous Utah, and a few inconsiderable and widely scattered villages, is there a white community that pretends to hold property, and especially lands, in common. This is the fundamental error from which proceed the troubles which afflict the five nations. The practical operation of this system of holding creates an aristocracy out of a few wealthy and powerful leaders, while the poor, although equal owners, are so impoverished as not to be able to assert their equal rights of property and manhood.

I am not recommending that Congress shall undertake to do anything with reference to these five civilized tribes which is inhibited by the treaties. But I do advise the nations themselves to awake to a true appreciation of their own situation, and to have respect for that public opinion in this country which makes laws and forms States and

which has thus far protected them in their treaty rights. I do advise our red brothers, whose interests I desire to see promoted, to advise with each other and to act wisely by passing just and equal laws for the division of lands in severalty, allotting to each member of the tribe his own birthright. The treaties I hope to see observed. But when the continued observance of those treaty obligations works an injury to the Indians by alienating from them the mass of the people of the United States, who are by instinct opposed to all monopoly, or when it does great injury to the Indians themselves, it seems to me it is the duty of the Indians to agree among themselves to a modification of those treaties—to remodel all such laws and customs as give a monopoly to a few (or even to many), and to place themselves abreast the times and in accord with the ideas of free and equal citizenship which prevail in this great country.

Territorial government.—If the Indians of the five civilized tribes would then put away tribal relations, and adopt the institutions common to our Territories or States, they would no longer be subjected to the jealousy, contention, and selfish greed of adventurous land-grabbers who now seem to regard the Indian a legitimate object of prey and plunder. These adventurers do not attempt to dislodge and drive from their domiciles the peaceful white settlers in their distant homes. Let these Indians once assume all the responsibilities of citizens of the United States, with its laws extended as a protecting ægis over them, and the day of their fear and apprehension of marauding whites will be forever ended. When this is done then will the five civilized tribes, and perhaps other tribes of the Indian Territory, be ready to form a territorial government and pass, as other Territories, under the protection of our Constitution and laws and be represented in Congress by their own delegate.

The great objection that is urged by the Indians to dissolving their tribal relations, allotting their lands, and merging their political form of government into an organized Territory of the United States, arises out of their excessive attachment to Indian tradition and nationality. I have great respect for those sentiments. They are patriotic and noble impulses and principles. But is it not asking too much of the American people to permit a political paradox to exist within their midst—nay, more, to ask and demand that the people of this country shall forever burden themselves with the responsibility and expense of maintaining and extending over these Indians its military arm, simply to gratify this sentimentality about a separate nationality? No such exclusive privilege was granted the Pueblos of New Mexico, nor the inhabitants of California, Utah, and Arizona, or any of the more northern Territories, including Alaska.

It is alleged that Congress has no power, in view of the treaties with those Indians, to do away with their present form of government and institute in its stead a Territorial government similar to those now existing in the eight organized Territories. While I greatly prefer that these people should voluntarily change their form of government, yet it is perfectly plain to my mind that the treaties never contemplated the un-American and absurd idea of a separate nationality in our midst, with power as they may choose to organize a government of their own, or not to organize any government nor allow one to be organized, for the one proposition contains the other. These Indians have no right to obstruct civilization and commerce and set up an exclusive claim to self-government, establishing a government within a government, and then expect and claim that the United States shall protect them from

all harm, while insisting that it shall not be the ultimate judge as to what is best to be done for them in a political point of view. I repeat, to maintain any such view is to acknowledge a foreign sovereignty, with the right of eminent domain, upon American soil—a theory utterly repugnant to the spirit and genius of our laws, and wholly unwarranted by the Constitution of the United States.

Congress and the Executive of the United States are the supreme guardians of these mere wards, and can administer their affairs as any other guardian can. Of course it must be done in a just and enlightened way. It must be done in a spirit of protection and not of oppression and robbery. Congress can sell their surplus lands and distribute the proceeds equally among the owners for the purposes of civilization and the education of their children, and the protection of the infirm, and the establishment of the poor upon homesteads with stock and implements of husbandry. Congress cannot consistently or justly or honestly take their lands from them and give or sell them to others except as above referred to, and for those objects alone. The sentiment is rapidly growing among these five nations that all existing forms of Indian government which have produced an unsatisfactory and dangerous condition of things, menacing the peace of the Indians and irritating their white neighbors, should be replaced by a regularly organized Territorial form of government, the territory thus constituted to be admitted at some future time as a State into the Union on an equal footing with other States, thereby securing all the protection, sympathy, and guarantees of this great and beneficent nation. The sooner this sentiment becomes universal the better for all concerned.

SURPLUS LANDS IN INDIAN TERRITORY.

The vast surplusage of land in the Indian Territory, much of it, too, not surpassed anywhere for fertility and versatility of production, which can never be utilized by the Indians now within its borders nor by their descendants (for it is not probable that there will be any material increase in numbers of Indian population), must sooner or later be disposed of by Congress some way or other. Were all the Indians of the United States to be uprooted and transplanted to this Territory, all living Indians, including those now resident there, could have 256½ acres each. This is estimating the whole Indian population of the United States, excluding Alaska, at 260,000. As the Indian Territory has an area of 64,222 square miles, or about 520 acres for each person now in the Territory, of course the problem presents itself for public consideration, What disposition or division of the Indian Territory can be justly, fairly, acceptably, and harmoniously made?

The Kiowas and Comanches, the Wichitas and the Cheyennes and Arapahoes, are the only tribes in the Indian Territory located west of longitude 98°. The reservation of the Cheyennes and Arapahoes is simply set aside by executive order, and the Indians occupying this tract do not hold it by the same tenure with which the Indians in other parts of the Indian Territory possess their reserves. In my last report I suggested that, as Oklahoma is surrounded on three sides by territory now occupied by Indians, its settlement by white people, even were it lawful, would be attended with considerable risk to the peace of both races. Also, that if it should be thought by Congress desirable to open to white settlement any part of the Indian Territory, it would be safer and better for all concerned, and especially the Indians, that the Cheyennes, Arapahoes, Kiowas, Comanches, and Wichitas be removed east, either to Oklahoma or to any other unoccupied land east of longitude 98°.

and that all lands west of that line be valued and sold at a fair price, and the proceeds reserved for the civilization of the Indians.

Below is given an interesting table, showing the whole number of acres in the Indian Territory east and the whole number west of longitude 98°, and the distribution of population:

Total number of acres in Indian Territory	41,102,540
Number of acres in Indian Territory west of 98°	13,740,229
Number of acres in Indian Territory east of 98°	27,362,311
Number of acres of unoccupied lands in Indian Territory east of 98°	3,672,640
Number of Indians in Indian Territory west of 98°	7,616
Number of Indians in Indian Territory east of 98°	6,182
Total number of Indians now in Indian Territory	13,798
Number of acres each Indian would have if unoccupied lands east of 98° were divided equally among Indians now living west of 98°	483
Number of acres each Indian would have if all lands east of 98° were divided equally among all Indians now in Indian Territory	351

It is apparent that, as there are now only 7,616 Indians west of longitude 98°, if these Indians were placed on the 3,684,305 acres of unoccupied lands east of that meridian, each Indian would have 483 acres, an area of land far in excess of what he would need. But we also see from this table that there are west of 98°, including Greer County, 13,740,229 acres, which would be sufficient to furnish homes of 100 acres each to 137,402 people; and supposing each settler to have five in his family, it would support a population of 687,010 souls. Add to this "No Man's Land," lying immediately west and adjoining, containing 3,672,640 acres, and we see at once that there is territory enough in those two areas to found a State equal in size to many States of the Union. Another advantage of this arrangement would be that the Indians would be together in a more compact form, while the whites would be by themselves.

When my last report was made the time and circumstances were auspicious for the adoption of these suggestions, if Congress entertained them at all, for the reason that at that time the Indians west of 98°, especially the Cheyennes and Arapahoes, had been severely admonished by the Government, by a display of military force, that they would no longer be permitted to obstruct those of their tribe who desired to adopt the white man's way. To this admonition almost universal heed was given, and a large number at once began to prepare for settling down and cultivating the soil. In consequence of this recent change in their wishes and habits, very many houses have been erected and a large acreage of sod broken and extensive crops cultivated. A year ago these Indians had less to attach them to their homes than they now have, and therefore their removal east would have been less distasteful than now. Nevertheless, as the distance is short and the lands to which they might be moved are much superior to those which they now occupy, I doubt not that, by paying them for their improvements or by making similar improvements on their new homes, they would cheerfully obey the wish of Congress should the body conclude to remove them to Oklahoma or to some other fertile unoccupied lands east of 98°. During the last twelve months these Indians have not only made rapid progress in farming, but also in disposition to have their children educated, more than two thirds of the Cheyenne and nearly all the Arapaho children having been enrolled in school. I am recently and reliably informed by a leading missionary and Indian educator that if sufficient buildings are furnished, all of their children of school age will be at school in the course of another year. Great efforts have been made by these Indians, and far more has been accomplished in the last year in the way of farming than ever before.

At this time a general wish prevails among them for the construction of dwelling-houses. All these facts taken into consideration, it becomes apparent that if it should be the desire of Congress to dispose of this section of the Indian Territory, it will be attended with embarrassment even now, and of course, as the Indians open and improve farms and build houses and prepare to live, they will become more attached to their homes and less disposed to emigrate, even to better lands which are but a short distance away.

My apology, if apology is needed, for presenting these facts and suggestions somewhat earnestly, arises from my deep conviction that the proposition to throw open Oklahoma to white settlement, surrounded as it is by Indians on three sides, would be an experiment dangerous to all concerned, and especially would the Indians west of Oklahoma be abraded and eventually obliterated by the surging waves of white population striking upon them from all directions. This subject is of very great importance; and in view of the persistent efforts which have been made by parties more or less organized to possess themselves of lands within the Indian Territory regardless of law and the rights of these Indians, and in view, too, of the action of a large number of Representatives as expressed by bills presented and speeches made in Congress, I feel it my duty especially to invoke your consideration of the subject, not only as a matter of justice and right and the interest of the Indians, but also as a respectful recognition of the demands of those Representatives whose opinions and views are entitled to the highest respect.

I therefore recommend, as a preliminary step, that Congress authorize the Department to appoint a commission, who shall visit the Cheyennes and Arapahoes, the Wichitas and the Kiowas, Comanches and Apaches, in the Indian Territory, to ascertain their views with reference to the subject of removal to lands in said Territory east of 98°.

If any portion of the Indian Territory is to be opened to white settlement, then I think the suggestions which I have offered are the most practical and would cause the least possible dissatisfaction and injury to the Indians. Those of the Western tribes who would be immediately affected by this action could suffer only temporary inconvenience by removal. The same improvements which they now have could easily be made for them and at little expense in their new home, and the improvements already made on their present location could be sold at their value to purchasers. But until Congress takes definite action upon this subject this office will feel it to be its duty to press forward the settling upon lands or homesteads of all the Indians west of Oklahoma, and to encourage them to open farms, erect houses, and make other improvements as rapidly as possible; for no time ought to be lost in teaching these people to support themselves, and to stop all work and improvement would throw them into a state of idleness which would soon lead to crime and disorder, if not to actual conflict among themselves and with their white neighbors.

U. S. COURT IN THE INDIAN TERRITORY.

The present anomalous condition of legal affairs among the five civilized nations calls for wisest counsel and for the most prudent and thoughtful consideration of the executive and legislative departments of this Government. It is well known that within their borders are many people of foreign or white blood who are intruders, and who are absolutely independent of Indian statutes, and are also independent of

the laws and authorities of the several States and almost of the United States Government. Each Indian nation has a form of government, with a system of laws by which malefactors may be punished and litigants may determine their rights, provided they are all Indians. Should a white man violate any of the statutes of these nations he can only be ordered out of the Territory by the Commissioner of Indian Affairs, who seems to be anomalously invested with certain negative and restraining powers, but with no other actual positive authority in such matters. In the event of strife or contention over property or any civil cases between white men or between white men and Indians there is no law applicable.

To such an extent has this uncertainty of jurisdiction and authority prevailed that the borders of these nations have become the refuge of thousands of evil-doers who have fled from their homes in the States and made this region a Botany Bay. Murderers, horse-thieves, gamblers, and other violators of law have flocked thither by hundreds and are there to-day, and in many instances in open defiance of the United States marshal. Another despicable class of persons have made this country a refuge to shield them and their property from the just claims of legal creditors. They obtain upon credit the property of citizens of adjoining States and then secretly skip across the line into the Indian country, where they are secure from arrest and their property from judicial process. The only remedy is for the agents of the Indian Office with its meager force to hunt out them and their property and drive them across the line again into the States where State law will reach them. During the past year several such cases have been brought to the attention of this office in which judgment having been obtained in the State of Texas against United States citizens the property subject to execution had been fraudulently conveyed to and secreted in the Territory with the deliberate purpose of depriving the creditor of the fruits of his judgment. The State processes not running in the Territory, and there being no law to meet such cases, the Department, on being appealed to, decided that, on broad grounds of public policy, it could not consent to the Indian Territory being made a sanctuary for dishonest debtors or their ill-gotten spoils, and on due proof of the facts alleged in such case directed the removal of the concealed property from the Territory.

A similar state of affairs, though elsewhere it has not yet reached such serious proportions, exists outside the five civilized tribes throughout the whole Indian Territory.

In *criminal* cases in the Indian Territory, where a white man and an Indian are the parties, or where both parties are white, the case can be tried under existing statutes (act of January 6, 1883, 22 Stats., 400) before the United States courts for the district of Kansas, the western district of Arkansas, or the northern district of Texas, according to the *locus* where the crime was committed. The courts at Wichita and Fort Scott, Kans., have exclusive original jurisdiction over all that part of the Territory lying north of the Canadian River and east of Texas and the one hundredth meridian, not set apart to and occupied by the Cherokee, Creek, and Seminole Indian tribes; the court at Graham, Tex., has like jurisdiction over that part of the Territory not so annexed to the district of Kansas, and not set apart to and occupied by the Cherokee, Creek, Choctaw, Chickasaw, and Seminole Indian tribes; whilst the court at Fort Smith, Ark., retains the jurisdiction over all that part of the Territory occupied by the five civilized tribes.

Speaking of this matter the United States Indian agent for the five civilized tribes, in his annual report herewith, remarks :

Crimes are gradually decreasing under the very superior management of the United States district court for the western district of Arkansas which has criminal jurisdiction over this agency, the active co-operation of the valuable and efficient Indian police force, and the improving management of the Indian courts. The Indian courts, as a rule, are not well conducted, but are growing more respectable under the strong educational forces at work. The crimes committed are not extraordinary in number when it is remembered that this country, by virtue of its sparse settlement and absence of State law, makes an excellent hiding place for refugees from justice. There has been located at this point (Muscogee) a United States commissioner, Hon. John Q. Tufts, formerly Indian agent, who has been of much service in the administration of the criminal law.

The chief defect in the administration of law at Fort Smith has been the great distances necessary for witnesses to travel who live in the remoter parts of this district. It is as much a punishment on the witness as it is on the accused, almost, for owing to the pressure of business before the court he has probably to make three or four trips, 150 miles each way, across the country, and thus go some 900 or 1,200 miles on horseback to tell what he knows about a horse thief. This is very expensive, and people would rather let crimes go unreported than endure the loss incident to prosecution. It would be an immense saving in mileage for its thousands of witnesses, &c., and other costs to the United States Government, if the court were moved to Muskogee or Fort Gibson. It certainly would secure a better administration of justice, and relieve the Territory people of a heavy expense in attending this court.

Similar representations as to the remoteness of courts of jurisdiction have from time to time been made by other agents located at different points in the Territory; and whilst the condition of things has been somewhat ameliorated by the act of 1883 above referred to, which distributed the jurisdiction over the Territory between three courts instead of one, as theretofore, I have little doubt that many flagrant cases of crime now go unpunished owing to the difficulty and expense of attendance on the courts as now located.

The time-honored maxim, "There is no wrong without a remedy," seems to have no application to the Indian Territory, and some remedy for this unsatisfactory and I may add alarming situation should be wisely considered and promptly applied by Congress. The immediate necessity for the establishment of a United States district court within the heart of the territory of the five civilized nations, at some convenient point accessible by railroad—say Muskogee or Fort Gibson—no longer admits of a doubt. It is the promptest remedy that can be applied to arrest the evils referred to. In this opinion I am sustained by the late Senatorial committee of which Hon. H. L. Dawes was chairman, which last year visited this Territory under a Senate resolution; and Judge Parker, eminent for his learning, efficiency, and patriotism, fully concurs as to the necessity for the immediate establishment of this court.

The treaties made with the civilized tribes in 1866 all contain provisions for the establishment of a United States court in the Territory, with such jurisdiction and organized in such manner as may be prescribed by law; and I understand that there is a general wish among the leading and more intelligent Indians themselves that Congress at once pass the necessary law for its establishment. Measures have been repeatedly introduced, in fact are now pending in Congress, for the establishment of such a court, and I trust that the suggestions made may be deemed worthy of consideration.

In any event, whether Congress decides to establish the United States court in the Territory, or to leave the jurisdiction where it is, provision should be made for extending such jurisdiction to civil cases where an Indian, or person of Indian blood, resident in the Territory, and a citizen of the United States are the parties, and also, if possible,

for the enforcement of civil process issuing out of a State court against the property of a United States citizen held or concealed in the Indian Territory. It is due to the commercial industries of the country that they should be protected, and the creditor enabled to get his just dues, without coming as a suppliant to this Department. As has already been stated, in civil cases between Indians and white men in the Territory, the agency is now the only tribunal where they can be adjudicated, and much valuable time, both of the agent and of this office, which should be devoted to other matters, is consumed in hearing and adjusting (so far as possible) such complaints. All this can be remedied by conferring civil jurisdiction upon the United States courts, in which such cases should properly be tried. The power inherent in a judicial tribunal to enforce its decrees would be respected, and the civilized Indian who is capable of making and appreciating a contract would be taught that, whilst his Indian blood would not shield him against the enforcement of his just obligations, his right to a corresponding performance of the contract on the part of the white man would be protected. In regard to this Agent Owen says:

Owing to the large number of United States citizens in the Territory, there are a large number of civil cases constantly arising between themselves alone, or with Indian citizens, some involving large sums. There is no judicial tribunal to settle such cases, and as they must necessarily increase in number and importance, some provision ought to be made. If the Federal court is clothed with power to try an Indian's right to live, I see no reason why it cannot try his rights to property when disputed by a United States citizen. At all events, this stands as a serious chasm in the law, and it is my duty to report it.

LEASES OF INDIAN LANDS.

In my last annual report I gave a history of the troubles on the Cheyenne and Arapaho Reservation, in the Indian Territory, growing out of the grazing leases, and of the measures taken to restore peace and tranquillity amongst the Indians.

Under the President's proclamation, therein referred to, the leases were declared null and void, and the cattle, together with all unauthorized persons, were removed from the reservation as speedily as it was practicable to do so. The removal was peaceably effected, and, I am gratified to say, without conflict between the Indians and the whites.

Contrary to the predictions of interested parties, who foretold all kinds of suffering, disasters, and outbreaks when the lease-money should be stopped, it appears from the report of Captain Lee, of the United States Army (who was placed in charge of the Cheyennes and Arapahoes at the time of the threatened outbreak), that not a single Indian has expressed a desire for a renewal of the leases. On the contrary, all have given pronounced expression of satisfaction that the leases were annulled and the cattle and cattlemen removed. They no longer contemplate the monopoly of nine-tenths of their reservation by outsiders, but in place thereof they view with satisfaction their own fields of corn, and farms inclosed with fences, put up by their own labor, the wire being furnished by the Department. The annual report of Captain Lee, on the condition and progress of the Cheyenne and Arapaho Indians, will be found interesting reading, and great credit is due that officer for the energy and zeal he has put into his work during his comparatively brief tenure of office. His report contains full statistics of farms opened and cultivated, in the face of many obstacles and discouragements, by Indians and persons of Indian blood lawfully resident on the reservation. That the gratifying condition of

affairs reported by Captain Lee could ever have come to pass during the existence of the leases is a proposition which needs no argument to controvert.

In my last annual report (supplemented by Senate Ex. Doc. No. 17, Forty-eighth Congress, second session) detailed particulars of all leases made by Indian tribes and bands of lands for grazing purposes, so far as the same had come to the knowledge of this office, were furnished. Of these leases, those made by the Cheyennes and Arapahoes were, as already stated, annulled by Executive proclamation, and the following-named have been practically abandoned, viz: the lease from the Quapaw tribe of Indians to H. R. Crowell, the Citizen Band of Pottawatomies to Catherine Griefenstein, the Prairie Band of Pottawatomies in Kansas to Anderson & Co., and the Crow Indians of Montana to Wilson & Blake. In the absence of any complaints to this office by the Indians, or the several United States Indian agents in charge, none of the other lessees mentioned have been disturbed, pending action by Congress on the general subject.

The decision of the Attorney-General that the system of leasing Indian lands which has hitherto prevailed is illegal without the consent of Congress only adds to the difficulties which beset this office in dealing with this question of leases. In my last report this matter was referred to as follows:

I cannot too strongly impress upon the Department the importance of an early disposition of this much vexed question. The leasing system should either be legalized, with proper restrictions, or it should be abolished altogether. In its present loose and indefinite shape it is a source of the greatest embarrassment to this office, and a hinderance to the proper and effective administration of Indian affairs.

If Congress would authorize Indians to dispose of their grass, or would take any definite action as to the policy which this office can logically pursue in regard to Indian grazing lands, it would materially lessen the perplexities and confusion which now pertain to the subject. Moreover, if some way could be adopted by which, under proper restrictions, the surplus grass on the several Indian reservations could be utilized with profit to the Indians, the annual appropriations needed to care for the Indians could be correspondingly and materially reduced.

ALLOTMENTS OF LAND IN SEVERALTY AND PATENTS.

During the year 17 certificates of allotments have been issued to the Indians on the Lake Traverse Reservation, under the treaty with the Sisseton and Wahpeton bands of Sioux (15 Stats., 505); 2 to the Indians on the White Earth Reservation, under the treaty with the Chippewas of the Mississippi, concluded March 19, 1867 (16 Stats., 721); 55 to the Sioux Indians at the Rosebud Agency, under the sixth article of the Sioux treaty, concluded April 29, 1868 (15 Stats., 637); and 12 to the Sioux Indians at the Crow Creek Agency, under the same treaty.

Patents have been issued as follows: Two hundred and eighty-one to the Chippewas of Lake Superior, on the Bad River, Lac Court Oreilles, l'Anse and Vieux de Sert, and Fond du Lac Reservations, under the provisions of the third article of the treaty of September 30, 1854 (10 Stats., 1110); 3 to the Sisseton and Wahpeton bands of Sioux, under the fifth article of the treaty of February 19, 1867 (15 Stats., 505); 123 to the Santee Sioux Indians, under the treaty of April 29, 1868 (15 Stats., 637); 68 to the Chippewas of Saginaw, Swan Creek, and Black River, under the treaties of August 2, 1855 (11 Stats., 631), and October 18, 1864 (14 Stats., 657); 167 to the Puyallup Indians, under the treaty

of December 26, 1854 (10 Stats., 1132); 46 to the S'Kokomish Indians, under the treaty of January 26, 1855 (12 Stats., 933); 1 to an Omaha Indian, under the act of August 7, 1882 (22 Stats., 341); and 1 to a Winnebago Indian, under the act of February 21, 1863 (12 Stats., 658); making the total number of certificates 86 and of patents 690; grand total, 776.

Two special agents are now engaged in the work of allotting the lands on the Crow Reservation in Montana.

In accordance with your directions, special instructions have been issued to the agents at Yankton, Lower Brulé, and Warm Springs to urge upon the Indians under their charge the importance of taking their lands in severalty, as allowed by their respective treaties, and to press the work of allotting lands with the utmost vigor. Similar instructions will be given other agents as soon as the condition of the surveys will permit such work to be done.

The general allotment bill again passed the Senate at the last session, and was favorably reported in the House of Representatives. As there seems to be no substantial opposition to this bill, it is hoped that it will become a law during the coming winter. Its passage will relieve this office of much embarrassment and enable it to make greater progress in the important work of assisting the Indians to become individual owners of the soil by an indefeasible title.

Nine hundred and fifty-five patents have been delivered to the Omahas during the past year. Reports differ as to the degree of progress attained by the Omahas since they have received allotments and undertaken to manage their own affairs, and it must be expected that some members of the tribe, not so progressive nor so well disposed as others, will take advantage of the newly acquired freedom from agency restraint to enjoy and improve the increased opportunity thus afforded them for shiftlessness or mischief-making. All transition periods have their peculiar difficulties and discouragements. But on the whole the success of the Omahas is such as to impress favorably friends of the Indians and believers in their civilization, and to afford to Indians everywhere the highest encouragement to adopt the same policy. The efforts of a few white friends, among whom the name of Miss Alice Fletcher, of Boston, might receive special mention without injustice to or derogation of the others, have furnished practical demonstration of the disposition and ability of the Indian to support and govern himself. There is something inspiring to the soul and heart of man when he realizes that he is not a slave, or a ward, or a dependent, and that the responsibilities of manhood are thrown upon him and he will be judged according to the way in which he meets and discharges them. I trust the true friends of Indian progress everywhere will unite their voices in this behalf, and will press with zeal, determination, and all practicable dispatch the allotment system among Indian tribes.

FARMING BY INDIANS.

According to the intention expressed in my last report, special attention has been paid during the year just past to the encouragement of agricultural pursuits by Indians. A majority of the grown-up Indians on reservations, through want of early training and by reason of repugnance to any kind of manual labor, which their traditions and customs lead them to look upon as degrading, are very poor material out of which to make farmers. Even those who are most willing to work lack the foresight, good husbandry, economy, and persistence neo

essary to make farming successful. They are easily discouraged; the failure of one crop is almost fatal to their hopes in that direction, and they are inclined to give up further effort. It must be understood, also, that many of them are located on reservations where the soil is poor, or no regular rains fall, or the climate is so severe and the seasons so short that it would be a difficult matter for a first-class white farmer to make a living. These drawbacks to the progress of the Indians must not be lost sight of in considering what results we have from the expenditures made by the Government to assist them. It cannot be expected that under such circumstances all or even many will at once, or in the course of the next five or ten years, step from the position of ignorant, shiftless, lazy savages to that of successful independent farmers; but this object is being constantly kept in view, and all official action taken by me will tend to that result, for in it, in my opinion, lies the only hope of the survival of any considerable portion of the Indian tribes.

In March last each Indian agent was informed that the permanent establishment of the Indians in agricultural pursuits should be considered the main duty of himself and every agency employé; that all must work for this result; that wherever practicable every able-bodied Indian who had not already done so must commence at once to cultivate a piece of ground, and that those who were already tilling small patches must be induced to go to work on a larger scale; that the farmers at the various agencies must not only advise and counsel with the Indians about farming operations, but must themselves go to work, and by example show them how to select proper land for cultivation, how and when to prepare it, when and what to plant, how to care for the growing crops, to harvest them, to prepare the produce for market, and to market it so as to make farming pay. At the same time they are expected to teach the Indians economy and foresight and patient perseverance, and to show them how to save seed for next year and how to care properly for their work animals and stock and provide food and shelter for winter use.

I considered it my duty to give these specific instructions, and I intend to see to it that they are fully carried out. Unless an Indian can be shown how he himself can farm to advantage, that is, make a comfortable living by farming without help from others, the effort to make him a farmer might as well be abandoned.

Since the beginning of the season good reports have been received from many of the agents, but of course it will be some years yet before it can be definitely ascertained just how far Indian farming has been established on a permanent paying basis. The annual statistical reports of the increased number of acres under cultivation or of the quantity of crops harvested cannot be depended upon to show this; it will only appear in time in the decrease of the amount of supplies to be purchased and the increase in the number of Indian families who have become permanently established in comfortable independence and in their bettered condition generally.

ADDITIONAL FARMERS.

By act of Congress, approved July 4, 1884, the sum of \$25,000 was appropriated—

To enable the Secretary of the Interior to employ practical farmers, in addition to the agency farmers now employed, at wages not exceeding \$75 per month, to superintend and direct farming among such Indians as are making effort for self-support.

The results of the judicious expenditure of this appropriation were so satisfactory that the same amount was appropriated for like purpose by act of Congress approved March 3, 1885, for the year ending June 30, 1886. The rule was adopted of appointing such additional farmers directly by this office, thus giving an opportunity to investigate each application and ascertain the fitness of the applicant for the position. The results have been eminently satisfactory, and much good has been done by the additional farmers going among the Indians, acquainting themselves with the individual peculiarities and needs of each, and giving the instruction and assistance best suited to each case. Of the \$25,000 appropriated, there remains unexpended a very small balance, caused by the fact that the service at a few agencies was not continuous through the year.

The results of the policy of employing additional farmers were of such marked benefit that it could no longer be called an experiment, and by act of Congress approved May 15, 1886, the sum of \$40,000 was appropriated for this purpose during the fiscal year ending June 30, 1887. By the expenditure of this increased amount in the employment of active, energetic men who have the best interests of the Indians at heart, there is no doubt that much good will result.

CARE OF AGRICULTURAL IMPLEMENTS AT AGENCIES.

Reports of inspectors and special agents have called attention to the fact that at many agencies but little care has been exercised by the agents and employes to see that costly agricultural implements and mechanical tools of all kinds were issued only to the deserving and to those who were prepared to use them and take care of them. Agents seemed to think that they got rid of all responsibility in the matter, which they were desirous to do, by issuing these supplies and paying no further attention to them. Consequently, reapers and mowers, plows, harrows, wagons and harness, and all kinds of costly agricultural implements and mechanical tools were found scattered about on nearly every reservation—perhaps used only a few times, then thrown aside or left where last used, exposed to the weather and going to decay. In some instances fence-wire was given Indians who had no posts to attach it to and knew nothing of erecting a fence, and thrashing-machines and horse-powers, after being used one season, were left to the mercy of the elements until the succeeding year's crop called attention to them, when, in many cases, as might have been anticipated, they would be found to be damaged beyond economical repair, and estimates for new ones would be submitted.

In order to correct this abuse, each agent has been instructed that he must use judgment and discretion in issuing implements; that he must keep every article in a safe and sheltered place until actually needed for immediate use by a deserving Indian, one who will agree to take proper care of it when not in use; also that it is the duty of the agent and the employes to see to it that an Indian knows how to use what is given him, and that he has some means of taking proper care of it; and further, that if he neglects to do so, after having been warned and in disregard of the promises which should be required of him and embodied in his receipt for the article, it is the agent's duty to retake possession of such articles as are found lying around neglected, and to issue them to some one more deserving, and thereafter to discriminate against the Indian who disregards his promise and agency instructions. Agents have also been informed that they will be held

responsible whenever such agricultural implements and supplies as reapers and mowers, fanning-mills, horse-powers, wagons and harness, plows, &c., and also small mechanical tools, such as augers, axes, hatchets, hammers, &c., are found scattered about a reservation, not in use, but neglected and exposed to the weather. I understand that a great improvement in this respect has already taken place and its continuance will be insisted upon.

EDUCATION.

In the extract from my first report, already quoted, I expressed very decidedly the idea that Indians should be taught the English language only. From that position I believe, so far as I am advised, there is no dissent either among the law-makers or the executive agents who are selected under the law to do the work. There is not an Indian pupil whose tuition and maintenance is paid for by the United States Government who is permitted to study any other language than our own vernacular—the language of the greatest, most powerful, and enterprising nationalities beneath the sun. The English language as taught in America is good enough for all her people of all races.

It is yet undetermined what kinds of schools are best adapted to prepare the Indian for self-support and that independence which will enable him to meet and successfully encounter the shrewd competition which henceforth every one will find contesting his path in the social, civic, and business affairs of life. Indian educators themselves differ in opinion as to what kinds of Indian schools are preferable, and the same difference exists among those in both houses of Congress who have charge of Indian matters. That each of the different kinds of schools or methods of education can lay some claims to merit cannot be denied.

The common day school on the reservation of course is the more economic method if limited to the immediate outlay of money for the time employed; but if viewed from the broader standpoint of permanent efficiency and enduring advancement of Indian youth, that plan may justly be challenged, for some years to come, by the friends of other methods as being not only the least efficient and permanent but eventually the most expensive. The greatest difficulty is experienced in freeing the children attending day schools from the language and habits of their untutored and oftentimes savage parents. When they return to their homes at night, and on Saturdays and Sundays, and are among their old surroundings, they relapse more or less into their former moral and mental stupor. This constitutes the strongest objection to this class of schools, and I fear that, in many instances, the objection is too well-founded. But as education and general civilization take deeper hold upon the Indian race, the day school on the reservation will show better results and must eventually become universal, as are our common schools in the States.

At this time, however, after the best examination I can give the subject, I would not advise any diminution of material aid and support to any of the different kinds of schools now fostered by the Government. All are doing most excellent and efficient service in their particular spheres, and all are performing a good part in the grand work of educating and civilizing the hitherto untutored Indians. The honor of this noble work belongs to the great American constituency and their representatives in both the legislative and executive branches of the Government; and I would call upon all officers and agents of the Government who come in immediate contact with our red brothers to im-

press them with the great benefits that are thus conferred upon them, for which their hearts should swell with grateful emotion.

That the Indians are not lacking in appreciation of their educational advantages is shown by the following statistics, which do not include the schools among the five civilized tribes nor the Indians of New York State, nor boarding and day schools supported by religious societies without expense to the Government.

Schools.	1885.		1886.		Increase in average attendance.
	No.	Average attendance.	No.	Average attendance.	
Boarding schools under agency supervision	84	4,066	85	4,817	18%
Day schools under agency supervision	86	1,942	90	2,370	22%
Training schools	7	1,425	7	1,562	9%
Schools in States	23	710	23	861	21%
Total	200	8,143	214	9,630	18%

Other statistics and statements in regard to Indian education are given in detail in the report of the superintendent of Indian schools herewith. The above figures show that the attendance at all of the schools has been largely increased this year over that of last year, and that the per cent. of increase is larger in the boarding schools and day schools under agency supervision than in the other schools.

This office has used all diligence to introduce school books among the Indian pupils in accordance with the spirit of the late act of Congress requiring the use in the public schools of such text-books as teach the baneful influences of ardent spirits and narcotics on the human system. I am thoroughly satisfied of the wisdom of the measure.

As an incentive to make the best use of the educational advantages afforded those pupils of both sexes who attend industrial institutions, I think it would be wise for Congress to make an appropriation from which every Indian youth who shall graduate from school and marry an Indian maiden who has also graduated may be assisted in settling down upon a homestead of 160 acres, in purchasing a team, in breaking and fencing land, and in building a house. If the homestead is not on an Indian reservation the man should also have the privilege of citizenship, including the right of suffrage. Such a law would greatly encourage Indian youths and maidens in their resistance to the evil and savage influences of their untutored friends, and would do much to keep them from a return to savage life.

DEPREDAATION CLAIMS.

In the Indian appropriation act approved March 3, 1885 (23 Stats, p. 376), provision was made for the investigation by this office of Indian depredation claims, embracing not only unexamined claims pending at that date, but also all others in favor of citizens of the United States which had already been examined and approved in whole or in part and remained unpaid, and which were chargeable against any tribe of Indians by reason of treaty obligations. This necessarily involved a careful review of previous office work upon this particular branch of business extending back to 1850, and embraced over 4,500 claims, aggregating \$13,000,000.

A large portion of the claims were presented for adjustment prior to the act of May 29, 1872, which required that rules and regulations be prepared prescribing the manner of making up and presenting such claims. Consequently a preliminary examination showed that most of these claims were not made out in proper or legal form. It was also found that a large number had not been submitted in council to the Indians concerned, as required by law and Department regulations, and a vast amount of correspondence was needed to bring such cases within Department rules and legal requirements before final action thereon could be taken.

The work under the act referred to (March 3, 1885) commenced in the following July, and in compliance with the specific requirements of said act, lists of all claims were prepared, showing as to each, as far as could be ascertained, the name and address of claimant, the date of the alleged depredation, by what tribe it was committed, the date of examination and approval of the claim, with a reference to the date and clause of the treaty creating the obligation for payment. Considerable correspondence was required to obtain the proper addresses of a large number of the claimants, and the requirement that the "clause of the treaty creating the obligation" be given necessitated a thorough and careful investigation of all the laws applicable to such cases, and of all the treaties with the various Indian tribes. This preliminary work was performed as expeditiously as possible, and the lists were submitted to the Department on the 10th of March last. Since that date 109 additional claims have been filed in the office, aggregating \$391,652.84.

On the 31st of March a schedule of 914 claims, which had been examined by the office in pursuance of the act of March 3, was submitted to the Department and transmitted to Congress, said claims aggregating \$3,015,997.70. This list embraced nearly all the claims on file which were barred by the limitation clause of the act of June 3, 1834. On the 15th of May last an act was passed by Congress under which all of said claims have been returned to this office for further examination.

The office records of depredation claims had become so defaced and worn that it was found necessary to prepare new records or dockets, and to transfer thereto nearly all the claims which had been filed in the Indian Office for the past thirty years, with a record of the action had upon each. This work has been completed, and the records are now in good permanent shape for use and reference.

Reports upon depredation claims made prior to the act of March 3, 1885, were very meager, embracing no abstract of the evidence, and merely stating the conclusions drawn therefrom. Hence if at any time Congress should desire to judge for itself as to the correctness of the conclusions arrived at by the office, it would be necessary to make a re-examination of all the original papers. Every report made since March, 1885, embraces a liberal abstract of all the testimony, the reasons for the decision made by the office, and the history of all previous action had upon the case. Of course more time and labor must be expended in the preparation of such reports, but the results will be far more satisfactory to all parties interested.

Claimants are afforded opportunity to file additional proof, if they desire to do so, and claims involving considerable amounts of money are investigated and reported upon to the office by special agents in the field.

Since the acts of March 3, 1885, and May 15, 1886, claimants and their attorneys have been unusually active in their endeavors to secure early consideration for their respective claims, and this pressure has corre-

spendingly increased the amount of such work devolving upon the office. In the work of arranging, examining, and reporting upon depredation claims have been engaged four examiners (three of whom are experienced lawyers), three copyists, and during the past six months two special agents in the field. Two additional special agents have been appointed recently.

COURTS OF INDIAN OFFENSES.

Longer experience makes more apparent the value of the courts instituted at various agencies for the punishment of minor offenses committed by the Indians. With one exception, all the agents at whose agencies courts are established speak very highly of the good effect of these courts and of the manner in which the judges perform their duties. As an illustration of the general tenor of the agents' reports, I quote the following from that of Agent McLaughlin, at Standing Rock:

There are regular bi-weekly sessions of the Indian courts held at the agency police headquarters, in a room set apart for that purpose, and the importance of this court is now such that it would seem almost impossible to do without it. Offenses of every character committed at the agency are brought before this court for adjudication, and it has relieved me of much annoyance in trivial matters, and aided materially in the more important cases. The judges, who are the two officers of the Indian police force and John Grass, an intelligent Indian who speaks English, are men of excellent judgment, whose decisions, impartially rendered, have been accepted in all cases the past year without any complaint, except in the instances where an appeal was made, and in two of which a rehearing was ordered upon additional testimony being produced.

These courts are also unquestionably a great assistance to the Indians in learning habits of self-government and in preparing themselves for citizenship. I am of the opinion that they should be placed upon a legal basis by an act of Congress authorizing their establishment, under such rules and regulations as the Secretary of the Interior may prescribe. Their duties and jurisdiction could then be definitely determined and greater good accomplished.

At some of the agencies it has been found impracticable to establish these courts from the fact that good men cannot be found who are willing to serve as judges without compensation. At others the make-shift policy has had to be resorted to of detailing members of the police force to act as judges in court! The payment of a small monthly salary would have a most salutary effect in giving greater dignity to the office and rendering it possible to secure better men for judges. For this purpose I have asked for the next fiscal year an appropriation of \$5,000.

JURISDICTION OF CRIMES COMMITTED BY INDIANS.

In my last annual report attention was called to certain defects in the ninth section of the act of March 3, 1885 (23 Stats., 385), providing for the punishment of certain crimes committed by Indians. Subsequently a bill was prepared and submitted to Congress relieving the Territories of the expenses incident to the enforcement of the law, and extending its provisions to that portion of the Indian Territory not covered by the laws of the five civilized tribes. I deem the passage of this or a similar bill to be necessary to the proper execution of the act. In Dakota especially the county authorities refuse to prosecute Indians guilty of the most serious offenses, on the ground of the expense incident to such prosecution. As the counties derive no revenue from the reservations within their limits, the injustice of compelling them to assume the burden of these prosecutions is apparent.

SURVEYS OF INDIAN RESERVATIONS.

The Indian appropriation act for the current year contains an appropriation of \$25,000—

For survey of Indian reservations and of lands to be allotted to Indians, and to make allotments in severalty..

This amount will probably be sufficient to meet the pressing necessities of the service, so far as the survey of exterior boundaries are concerned, and to remark former surveys. Requests have been made for the subdivision of townships on the Great Sioux Reservation; but very little of this work can be done. A similar appropriation should be made for several years to come, until all the reservations where allotments can be made are subdivided and properly marked.

TRESPASSES AND TIMBER DEPREDATIONS ON INDIAN LANDS.

At the last session of Congress the Senate again passed a bill (S. 1055) to amend section 2148 of the Revised Statutes, in relation to trespassers on Indian lands, but beyond reference to the House Committee on Indian Affairs, I do not find that any further action was had upon it.

A bill (S. 2131) was also introduced in the Senate to amend section 3388 of the Revised Statutes, in relation to timber depredations, so as to make it apply to Indian lands, but was not reached before the adjournment.

The necessity for legislation on both these subjects has been so repeatedly and emphatically urged in previous annual reports of this office that I deem it unnecessary to say anything more, except to express the hope that Congress will see the importance of finally disposing of both these measures at the ensuing session.

LOGGING OPERATIONS BY INDIANS.

During the season 1885-'86, 178 contracts for the cutting, sale, and delivery of pine logs, under Department authority of September 28, 1882 (full particulars whereof will be found in the annual report of this office for 1884), were made by individual Indian patentees of the Lac Court d'Oreilles, Bad River, and Fond du Lac reservations, attached to the La Pointe Agency in Wisconsin. Under these contracts the Indians banked 63,945,769 feet of timber, at prices variously ranging from \$4 to \$6.25 per thousand feet. The net gain to the Indians on these transactions was \$131,281.46, of which \$58,006.70 was taken out in merchandise and supplies, and the balance, \$73,274.76, was paid in cash to the individual Indians. The agent reports that the general result of these operations is highly satisfactory; the Indians are all learning to work, are getting good, comfortable homes, and their condition is being greatly improved.

With some modifications in the manner of conducting the business, which the agent has been directed to make, there appears every reason to anticipate that the coming season's operations will be on a more extended scale, and will be still more beneficial to the Indians. White labor, except such as is absolutely necessary, is rigorously excluded from the reservations, and the Indian is taught to labor and permitted to reap the benefit of his toil.

INDIAN POLICE.

The greatest number of Indian police in the service at any one time during the fiscal year ending June 30, 1886, was 701. Considering the very meager compensation allowed, viz, \$10 per month for commissioned officers and \$8 per month for non-commissioned officers and privates, the service has been very satisfactory. The members of the police force are selected on account of their good character and influence among their people; a majority of them have families to support. They have proven themselves to be worthy of confidence, and have rendered valuable assistance to the agents in maintaining order and suppressing crime on the reservations. They are almost without exception courageous, determined men, who will without flinching face any danger in carrying out their instructions.

To bring the police service up to the highest degree of efficiency it is necessary that the entire time and attention of the men be devoted to their work, but it is often difficult to obtain the services of proper men on account of the small compensation. It would tend greatly to increase the efficiency of this branch of the service if a more liberal compensation could be allowed, even though the number of men should be reduced. The police in the discharge of their duties often come in contact with outlaws and men of desperate character, and being thus called upon to face danger and death it is but fair that they should receive a compensation in some degree commensurate with the service rendered. The cost of their support is money well spent, as at most agencies they are the only means which the agent possesses for protecting his Indians against liquor traffic, cattle thieves, the inroads of bad white men, and for the suppression of every kind of vice and lawlessness on the reservation. Without them he would have much less power either to punish the bad or protect the good, and the knowledge that he has this reliable force always at hand has a much greater influence for good than appears on the surface.

AGENCY EMPLOYÉS.

It is well known that the general public has long been impressed with the idea that much corruption prevailed in the employé service at Indian agencies; that many agents having in their own hands the power to employ or dismiss their assistants had surrounded themselves with such material as they could completely control through fear of discharge or by collusion with them in dishonest practices; that this condition of affairs rendered fraud easy and its detection by inspectors, special agents, and this office almost impossible, and that thus the Government and the Indians were plundered with impunity; and that worthless or worse employés were retained in office solely on the ground of their usefulness to the agent or through his fear of the use they might make of their knowledge of his practices in case he incurred their displeasure. It was also claimed that many agents had placed their relatives, or relatives of their bondsmen, in office merely through cupidity or to fulfill promises made, and had kept them there without regard to their fitness for the positions or their endeavors to discharge their duties, and without power to control them.

After giving this matter careful consideration, and becoming convinced that there must be some good grounds for so generally unfavorable an opinion in regard to it, I determined to make such a change as would effectually remove all just cause for doubt as to the honesty and

integrity of the service in this particular. Indian agents and school superintendents were therefore notified that the office would select and appoint all clerks as well as physicians and additional farmers. It was believed that this course would meet the approval of all good agents, and of those who considered the good name and best interests of the service paramount to personal preferences, since it promised them competent assistants, and at the same time relieved them of obligation either to their bondsmen or their relatives; and it was thought that thoroughly upright men would prefer to have entirely disinterested proof always at hand that their official acts were without stain.

I am pleased to be able to report that most of the agents were broad enough in their views, and had their own and the best interests of the service sufficiently at heart, cordially to support this move. The reports from various agencies satisfy me that this ruling that agency clerks shall be selected by the Indian Office is a wise one, and it has already been found to tend so directly and plainly to the improvement of the service that I have no doubt as to its necessity for the good of the Indians and the administration of agency affairs generally. A few agents have complained of this change, but they could advance no good reason against it, and I have considered it necessary to make the rule general and to treat all alike.

As I find that but little attention has heretofore been paid by the office to the qualifications for their respective duties of lower-grade employes, the plan has been adopted of plainly laying before all applicants for positions a statement of the duties that will be required of them, and of informing them that if they are found, on trial, to be incompetent, they will not be retained. Clerks must file a sample of their writing and give satisfactory information as to their proficiency, and farmers, blacksmiths, carpenters, &c., must satisfy me that they are experienced and capable in their various callings. Thus, when an appointment is offered to an applicant, he is given fully to understand what will be expected of him, and that if he is not confident that he can discharge the duties of the position it will be only to his disadvantage and loss to accept it. I am determined that, as far as I can ascertain the facts, no improper or incompetent employé shall remain in the service.

Physicians are required to be graduates of some reputable medical institution, and as it has been ascertained that in many cases agency physicians have been in the habit of treating persons not connected with the agency, for pay, to the neglect of their regular duty, they are directed to devote their entire time and professional skill to the Indian service.

Such employes as are directly appointed by this office are told that they are under the immediate control of the agent; that they must work in harmony with him, treating him with due respect and obeying his orders cheerfully; and that, as he is a bonded officer, they must take good care of the property for which he is responsible. On the other hand, while agents are not allowed to suspend or discharge any employé appointed by this office, any statement they wish to make as to the manner in which the employé behaves himself and discharges his duties is carefully considered, and such action taken thereon as is deemed just and for the best interests of the service.

RAILROADS.

Bad River Reserve, Wisconsin.—Since the date of my last annual report the Milwaukee, Lake Shore and Western Railway Company has completed its road through this reservation, and has paid the Indians,

in their tribal and individual capacities, what is deemed to be a just compensation for the right of way as provided for by the terms of the treaty under which they hold their lands. The deeds from individual Indian patentees to the railway company are now before the President, awaiting his approval, in accordance with the provisions of the patent.

Blackfeet Reserve, Montana.—Congress, at the last session, having passed an act (S. 2381) “granting to railroads the right of way through the Indian reservation in Northern Montana,” it was in due course referred by the President to this office, with an inquiry whether any objection was known to exist against its approval. Upon examination of the treaty with the several tribes and bands of Indians occupying the reservation (October 17, 1885, 11 Stats., 658), it appeared that the right to construct roads of every description thereon was expressly reserved to the United States, and as the proposed legislation appeared to afford reasonable protection to the Indians in providing for compensation to them, and in other respects, under the direction of the Secretary of the Interior, prior to the vesting of any right in a railroad company in and to the lands of the reservation, I returned the act stating that I saw no objection to its approval. The President, however, deeming that the bill did not sufficiently guard against the invasion of the rights and a disturbance of the peace and quiet of the Indians on the reservation mentioned, and not being satisfied that the legislation proposed was demanded by any exigency of the public welfare, returned the act to the Senate without his approval. (See Executive message, Senate Ex. Doc. 204, Forty-ninth Congress, first session.)

Oœur d’Alène Reserve, Idaho.—Quite late in the last session of Congress measures were introduced granting a right of way to the Spokane and Palouse Railway Company and the Washington and Idaho Railroad Company, respectively, through this reservation. Both bills have been referred to the United States Indian agent in charge for an expression of the views of the Indians thereon, and for investigation as to the necessity and advisability of the proposed legislation.

Crow Reserve, Montana.—Bills (S. 2778 and H. R. 9677) were also introduced authorizing the Billings, Clark’s Fork and Cooke City Railroad Company to construct and operate a railway through this reservation.

Fort Hall Reserve, Idaho.—By office letter of December 12, 1885, the attention of the Department was again called to the subject of the continued failure of the Utah and Northern Railroad Company to compensate the Shoshone and Bannack Indians for the right of way and lands of the reservation taken and used for the purposes of its road, constructed from north to south through the reservation in or about the year 1878, and the matter was made the subject of Executive message to Congress December 21, 1885. (S. Ex. Doc. No. 20, Forty-ninth Congress, first session.)

At the last session of Congress a bill (H. R. 2847) was introduced—

To authorize the Shoshone and Bannack Indians to sell to the Utah and Northern and Oregon Short-Line Railway Companies certain lands situated upon the reservation of said Indians in Idaho, necessary to said railway companies for railroad purposes and for the relief of said railway companies.

Finding, upon examination of this bill, that it made no provision for negotiations with the Indians in respect of the lands originally taken for the north and south line of the Utah and Northern Railroad, but was simply directed to the acquisition of additional lands at Pocatello Station (the junction of the two roads, where the railway companies seek to acquire some 1,600 acres), I returned the bill with the suggestion that the question of compensation arising out of the construction

of the north and south road be considered in connection with the proposed measure, and that the bill be amended in committee accordingly.

Late in the session, House bill No. 9378 (prepared in this office) was reported from the Committee on Indian Affairs, which authorizes the Secretary of the Interior to negotiate with the Shoshone and Bannack tribes of Indians, in such manner as he may deem most advisable, and upon just terms of compensation, for a cession to the United States of their title to so much of the lands of the Fort Hall Reservation, limited as in the bill mentioned, as are required for the purposes of the Utah and Northern Railway Company in the operation of its railroad running north and south through said reservation; also for a like cession to the United States of such additional land at Pocatello Station as shall be demonstrated to the satisfaction of the Secretary of the Interior to be actually necessary to the said Utah and Northern Railway Company and the Oregon Short-Line Railway Company for railway purposes and in the transaction of their authorized and legitimate business at that point; the result of such negotiations to be embodied in a written agreement to be signed by the requisite number of Indians, in conformity with the provisions of the treaty of July 3, 1868 (15 Stats., 676), and to be returned to the Secretary of the Interior, who is directed to report his action under the bill to Congress. A similar bill (S. 2789) was introduced in the Senate, but beyond reference to committee no further action was had by Congress on either measure.

Gila River (Pima and Maricopa) Reserve, Arizona.—Late in the session the House passed a bill (H. R. 9736) granting the Maricopa and Phoenix Railway Company a right of way through this reservation. The Senate, however, failed to take action on the measure.

Indian Territory.—In the annual report of this office for 1884 mention was made of certain acts of Congress passed at the first session of the Forty-eighth Congress granting to the Southern Kansas Railway Company, and the Gulf, Colorado and Santa Fé Railway Company, respectively, right of way through the Indian Territory. During the past year both companies have commenced operations. Maps of the first five sections, of twenty-five miles each, of the main line, and first four sections of the branch line of the Southern Kansas Railway, and of the first section of the Gulf, Colorado and Santa Fé Railway, have severally received your approval.

The Cherokee Nation having, by its national council, formally dissented from the allowances made in the fifth section of the act authorizing the construction of the Southern Kansas Railway, and certified the same to the Secretary of the Interior, Messrs. J. M. Galloway, of Fort Scott, Kans., W. H. Dyer, of Van Buren, Ark., and James Brodie, of Little Rock, Ark., have been appointed by the President a board of appraisers for the purposes named in the act, and have entered upon the duties of their appointment. The general council of the Otoes and Missouri, through whose reservation the main line passes, has also filed in the Department a formal protest against the allowances provided in the act.

During the last session of Congress acts were also passed granting a right of way through the Territory to the Denison and Washita Railroad Company, the Kansas and Arkansas Valley Railroad Company, and the Kansas City, Fort Scott and Gulf Railroad Company, respectively. The two former were approved by the President; the latter, not having been returned by the President within the time prescribed by the Constitution, became a law without his approval.

By act of Congress approved June 1, 1886, the time for completion of the Saint Louis and San Francisco Railway through the lands of the Choctaw and Chickasaw Nations (act of August 2, 1882) was extended two years from the date of passage of the act.

Numerous other measures granting a right of way through the Territory to various railroad companies were introduced during the last session of Congress, but, except as above mentioned, no definite action appears to have been had thereon.

Lake Traverse (Sisseton) Reserve, Dakota.—On the 12th December, 1885, I transmitted to the Department the completed agreement referred to in my last annual report, with the Indians of this reserve, for a right of way to the Chicago, Milwaukee and Saint Paul Railway Company, which has been so long pending, together with a draft of proposed legislation for a ratification of the agreement by Congress. December 17 the papers were transmitted by the Department to the President, and formed the subject of Executive message to Congress December 21, 1885 (Senate Ex. Doc. No. 22, Forty-ninth Congress, first session). A bill (S. 1086) was subsequently introduced in Congress for the purposes named, and referred to the Committee on Indian Affairs. It does not appear that Congress took any further action in the matter.

The Duluth, Huron and Denver Railroad Company has also applied for information as to obtaining a right of way through the Lake Traverse Reserve, and has been referred to Congress for necessary legislation.

Pottawatomie Diminished Reserve, Kansas.—The Chicago and Alton Railroad Company has applied for right of way through this reserve, and has been informed that, owing to the absence of any treaty stipulations with the Indians in regard to railroads, Congressional action is requisite.

Siletz Reserve, Oregon.—The Newport, Cape Foulweather and King's Valley Railroad Company has applied for a right of way through this reserve. There being no treaty provisions with the Indians in regard to the construction of railroads upon their reserve, the company has been informed that an act of Congress will be necessary.

Sioux Reserve, Dakota.—Application has recently been made by the Ordway, Bismarck and Northwestern Railway Company for authority to make a preliminary survey for a railroad projected from a point about ten miles south of Fort Yates; thence to run southwesterly through the Sioux Reservation on the most feasible route to the Black Hills. Not feeling warranted in giving my consent to the survey without previously consulting the Indians who have a common interest in these lands, I have referred the matter to the several Indian agents for the different bands of Sioux occupying the reservation, and instructed them to ascertain and report the sentiments of the Indians on the subject.

Partial and deferred legislation.—At the last session of Congress the following bills were passed by the Senate, but failed to receive action in the House, viz:

A bill (S. 1056) granting the right of way to the Carson and Colorado Railroad Company through the Walker River Reserve, Nevada.

A bill (S. 1057) granting the right of way to the Jamestown and Northern Railroad Company through the Devil's Lake Reservation, in Dakota.

A bill (S. 1211) granting the right of way to the Northern Pacific Railroad Company through the Yakama Reservation, in Washington Territory.

The agreements made with the Sioux Indians in 1880-'81 for a right of way through the Sioux Reservation, in Dakota, to the Chicago, Milwaukee and Saint Paul Railway Company and the Dakota Central Railway Company, respectively, still remain unconfirmed by Congress.

COMMISSION TO NEGOTIATE WITH VARIOUS TRIBES OF INDIANS.

By an item in the Indian appropriation act approved May 15, 1886 (Public No. 49, p. 17), provision was made—

To enable the Secretary of the Interior to negotiate with the several tribes and bands of Chippewa Indians in the State of Minnesota for such modification of existing treaties with said Indians and such change of their reservations as may be deemed desirable by said Indians and the Secretary of the Interior, and as to what sum shall be a just and equitable liquidation of all claims which any of said tribes now have upon the Government; and also to enable said Secretary to negotiate with the various bands or tribes of Indians in Northern Montana and at Fort Berthold, in Dakota, for a reduction of their respective reservations, or for removal therefrom to other reservations; and also to enable said Secretary to negotiate with the Upper and Middle bands of Spokane Indians and Pend d'Oreilles Indians, in Washington and Idaho Territories, for their removal to the Colville, Jocko, or Cœur d'Alène Reservations, with the consent of the Indians on said reservations; and also to enable said Secretary to negotiate with said Indians for the cession of their lands to the United States; and also to enable said Secretary to negotiate with the Cœur d'Alène Indians for the cession of their lands outside the limits of the present Cœur d'Alène Reservation to the United States, \$15,000, or so much thereof as may be necessary, to be immediately available; but no agreement shall take effect till ratified by Congress.

With a view to carrying out the provisions of this act, a commission composed of Hon. John V. Wright, Rt. Rev. H. B. Whipple, and Charles F. Larrabee, esq., was appointed to negotiate with the several bands and tribes named in the act; they are now in the field, under instructions dated July 27, 1886. It is confidently hoped that the labors of this commission will result in settling all matters of dispute between the various tribes and bands and the Government, and in the adoption of measures that will go far towards their civilization, education, and general advancement and welfare.

CENSUS.

In my last estimate for the Indian service, I had the honor to recommend that a small appropriation be made to enable this office to take a census of the Indians. Congress, however, declined to do so. I have concluded to invite your attention again to this matter, so important do I consider it.

The census of the Cheyennes and Arapahoes, taken by General Sheridan in June, 1885, showed that the real number of Indians was much below the number who previously had been supposed to belong to those tribes, and that, of course, they had been drawing rations and supplies largely in excess of their dues. The recent census ordered by this office under date of May 18, 1886, taken by Captain Bell, acting agent of the Pine Ridge Agency, shows that there had been carried upon the rolls 2,241 more Sioux than really existed, and that rations had been issued accordingly; that is, as shown by the agency reports rendered quarterly. With a knowledge of this fact, I have fixed a day upon which all the Indian agents on the great Sioux Reservation will be required to take a census of their respective Indians; and it is not improbable that a reduction in numbers, similar to that at Pine Ridge, will appear at other agencies. At this writing the result of the census thus ordered has not been made known to this office.

I do not doubt that an accurate census would show a decrease in the number of Indians, below the number now claimed, throughout the country, or at least at several of the agencies. The outlay for taking the census is inconsiderable when compared with the great saving it would probably effect. The saving in the two instances quoted—Cheyenne and Arapaho and Pine Ridge—will amount to a large sum annually.

INDIAN MONEYS.

This subject demands earnest attention. I have already in my former report (Report, 1885, page xxxvi) given a brief history of these funds, but the importance of the subject is such that I deem it proper to repeat a statement of the case. The class of funds under discussion is derived from various sources, but principally from a tax imposed upon others than Indians for pasturage of cattle upon Indian reservations, from sale of dead and down timber cut on reservations by other than Indians, from sale of the natural products of the reserves not the result of Indian labor, &c. From 1876, when funds of this kind were first reported to this office, up to the latter part of 1883, these miscellaneous receipts were not covered into the Treasury, but were held by the several Indian agents into whose hands they came, to be applied, under the personal direction of the Commissioner of Indian Affairs, to the sole use and benefit of the Indians of the reservations from which they were derived. But in March, 1883, Congress, in the deficiency bill for that year (22 Stat., 590), passed an act which is the first and only legislation on the subject. The act reads thus:

The proceeds of all pasturage and sales of timber, coal, or other product of any Indian reservation, except those of the five civilized tribes, and not the result of the labor of any member of such tribe, shall be covered into the Treasury for the benefit of such tribe, under such regulations as the Secretary of the Interior shall prescribe; and the Secretary shall report his action in detail to Congress at its next session.

The then Secretary of the Interior construed this act to mean that the Department had the right to use the money thus received in such manner as it might decide to be for the benefit of the Indians on the reservation, without further legislation or specific appropriation. The act, however, being somewhat ambiguous in its terms, was submitted to the Secretary of the Treasury for his views, who construed the law to mean that the money derived from the sources specified should be covered into the Treasury, but that it could not be taken out again without further legislation by Congress. Consequently since then miscellaneous receipts of the kind in question have, from time to time, been covered into the Treasury under the general caption "Indian moneys," there to await action by Congress. Meanwhile the Indians are deprived of the benefit of money which it is not disputed is theirs, and which it is believed Congress, by the act quoted, intended they should have.

Twice since my former report I have addressed the Department with a view of procuring such legislation as will allow this money to be drawn from the Treasury and applied to its legitimate use. On the 15th of March last I forwarded to the Department a draft of a bill, with the request that it be transmitted to Congress and that an earnest attempt be made to secure its passage. The proposed bill reads as follows:

Be it enacted, &c., That the Secretary of the Interior is hereby authorized to use the money which has been or may hereafter be covered into the Treasury under the provisions of the act approved March 3, 1883, and which is carried on the books of

that Department under the caption of "Indian moneys, proceeds of labor," for the benefit of the several tribes on whose account said money was covered in, in such way and for such purposes as, in his discretion, he may think best.

On March 20, 1886, this bill, with other papers on the subject, was laid before the House of Representatives in an Executive communication dated March 19, recommending favorable action thereon, and was referred to the Committee on Indian Affairs. The session of Congress being near its close, and nothing having been heard from the committee having charge of the bill, I again, on the 19th of June, urged that special effort be made to secure its passage. Congress, however, adjourned without taking action. Thus the matter stands.

The dissatisfaction spoken of in my former report as existing among the Indians on account of the retention of their money by the Government has been steadily increasing, and numerous and loud complaints are received both through the regular agents and the Indian inspectors. In one instance, according to an inspector's report, the dissatisfaction has reached such a degree that the Indians, in order to evade the law and get the use of the money, have resorted to the expedient of appointing one among them, other than the regular Indian agent, as their fiduciary, to collect the money due for grazing, hay, &c., from farmers, herders, and others, and to hold the amount so collected to be divided among them when their annuity payments are made. As the person appointed by the Indians is probably not bonded, they have no other security for the safe-keeping of their money than his personal integrity. Indian agents, on the other hand, are bonded officers, and as such are held to as strict an accountability for miscellaneous funds coming into their hands as for public money intrusted to their care.

At the date of my last report the aggregate amount of Indian moneys in the Treasury was \$13,096.81. Since then it has been constantly accumulating until at the present writing the aggregate probably reaches treble that amount.

The legislation asked for is not new legislation, nor does it appropriate a single dollar of public money. It is simply intended to give effect to what is believed to have been the plain intent of Congress by the passage of the act of March 3, 1883, but which intent has so far been frustrated by the construction put upon that law by the Treasury officials. Under these circumstances, and in common justice to the Indians interested, I respectfully but earnestly renew the request already made by both my predecessor and myself that Congress be urged to afford relief to the Indians and allay whatever dissatisfaction may exist among them on account of these moneys by passing the bill presented, or such other bill as will permit this money to be drawn from the Treasury and used for the benefit of the tribes to whom it rightfully belongs.

CASH PAYMENTS TO INDIANS.

During the year \$244,680.38 annuity or treaty money was paid per capita to Indians, and \$266,565.44 was paid for interest on funds invested for them, or held in trust in lieu of investment; altogether about \$511,246, or some \$11,000 less than during the previous fiscal year. Thus over half a million dollars, principally in small sums and in half-yearly payments, have been disbursed, with entire satisfaction to the Indians, so far as I can learn, and without incident worthy of special note, except it be the action of the Uncompahgre Utes at Ouray Agency, referred to elsewhere.

The agent cannot be blamed for his action in paying these Indians \$3.31 more per capita than they were entitled to, as he had no power to protect himself in case the Indians resorted to violence. But the extra payment must be suspended against him by this office, at least until the officers of the Treasury Department have had an opportunity to consider it. Now that a military post has been established in that immediate vicinity, a new, correct, and complete census of these Indians will be taken, and if it is found that any have received more than their share of the tribal funds the difference will be adjusted in future payment.

Some few of the members of the Wisconsin Winnebagoes still refuse to comply with the requirements of the act of 1881, so that their shares in the money provided by said act are still held for them. It is claimed by other members of the tribe, that, as these people have been properly and repeatedly notified, and have failed to present themselves for their shares, or to receive and receipt for the same, the money should be returned to the general tribal fund and divided amongst those who have complied with the law and are willing to receive it. This may finally be done, but at present it is thought best to hold it. The fear expressed in my last report, that cash payments to the Indians in Wisconsin were doing them little permanent good, is strengthened by reports since received; and, as I am informed that owing to the failure of the berry crop in that State much suffering is likely to ensue among them during the coming winter, I have recommended that a part of their money be expended for them in the purchase of subsistence supplies, to be distributed to them by a special agent at several points in the State most convenient to them. The first clause of the second section of the act above referred to authorizes this manner of applying their funds to their benefit.

I may again request attention to the two small annuities referred to in my previous report, viz, \$1,100 to the Eel River band of Miamies in Indiana and \$400 to the Pottawatomies of Huron. These yearly payments are so small, and the per capita share received by each person so trifling, that, in my opinion, it would be wise economy to make a final settlement with these Indians, by paying in one payment such an amount as might be agreed upon between them and the Government, thus saving to the Government considerable expense for making these yearly payments, and giving the Indians enough at one time to be of some substantial benefit to them. The Indians themselves are anxious to have some such settlement, and I respectfully recommend that such action as may be necessary to effect it be authorized.

INDIAN TRADE.

The endeavor to regulate and supervise trade among the various Indian tribes has given rise to many perplexing questions. The demand for improvement in the management of this branch of the Indian service, has been emphatic, and careful study has been given the subject, in the belief that changes could be made which would diminish the opportunities afforded unscrupulous traders to take advantage of the Indians.

In accordance with the proposed policy outlined in my last report, Indian agents have been instructed to submit to this office a statement of the annual gross sales of each Indian trader upon their reservations, and the number of trading licenses to be granted at each agency is determined by the amount of trade reported by the agent. Traders are required to forward monthly, through the Indian agents, invoices of

all goods received. The maximum amount of profit which may be realized on each article of merchandise is fixed by this office; the average of profits allowed will not exceed 25 per cent. of the original cost of the goods and the freight. A schedule of the prices charged by the trader must be conspicuously posted in each store.

If agents will co-operate conscientiously with this office in executing the above rules and regulations it cannot but effect the desirable end of providing the Indians with such articles as they need at prices which return only a fair profit upon the capital and labor invested by the trader, and of preventing extortion upon the helpless Indian, who, by reason of the remoteness of other stores, is often compelled to deal with the licensed trader.

Some of the traders apparently have failed to understand the restrictions imposed, and thereby have made the office considerable trouble. In some instances non-observance of the restrictions has resulted in a revocation of the license. On the whole, however, the present status of licensed trade among Indians is creditable and gratifying.

But it is earnestly hoped that the necessity for white traders upon the reservations will soon be superseded. Under the law the full-blood Indian is guaranteed the right to trade with the Indians of his tribe, without the restrictions imposed upon the half-breeds and white traders. It is the constant aim and effort of the Indian Office to make the Indian self-reliant and self-sustaining, and if this policy is persevered in, with the aid of the educational advantages available at almost every agency, I cannot but believe that the Indians will at an early day acquire sufficient ability to manage the trading posts themselves and supply their people with such goods as they may need.

SANITARY CONDITION OF THE INDIANS.

During the year a corps of sixty-seven physicians has been actively engaged in caring for the sick at the different agencies and training schools, and as a rule the men so employed have rendered very efficient service. As has been stated, physicians in the Indian service are appointed directly by the office, upon satisfactory testimonials as to character, ability, and experience. When it is shown that any one so appointed is incompetent or is careless in the discharge of his duties, a change is made at once. They are instructed to use every effort to overcome the influence of the native "medicine men," and to educate and enlighten the Indians in regard to the proper care and treatment of the sick. The good effects of this policy are already quite apparent, for although many of the older Indians cling tenaciously to their time-honored rites and ceremonies, the younger members of the tribes have, to a great extent, abandoned them, and rely upon the agency physicians. The influence which a physician of intelligence and good judgment soon acquires over the Indians under his care enables him to render great assistance in the work of eradicating the superstitions prevailing among them.

A table compiled from the monthly sanitary reports of the various physicians, showing the number of cases and nature of the diseases treated during the year, will be found herewith.

Many of the agency physicians recommend the establishment of hospitals at the agencies, where cases can be taken in and treated successfully, which, if left to the rude care of their friends and relatives and subjected to the exposure incident to living in tepees and rude huts, must, almost of necessity, terminate fatally. Small hospitals could be

established at comparatively slight expense to begin with, and could then be added to, from time to time, as necessity might require. An Indian who had been taken into such a hospital and received rational treatment and good nursing would not be slow to communicate his experience to his friends, and thus lead them to trust in the "white man's medicine," rather than in the beating of drums, rattling of bones, and singing and dancing of the medicine men. Nothing convinces an Indian more quickly or thoroughly than ocular demonstration, and when satisfied by his own observation and experience that the methods of the white man are better for him than the customs of his fathers he will soon adopt the former and abandon the latter. Anything that tends to weaken the hold of ancient superstitions and traditions upon the Indians ought to be taken advantage of, and nothing would yield a more prompt or profitable return in this regard than the establishment of agency hospitals. Some provision of this kind is very necessary for Indian schools, so that by isolating pupils affected with contagious disorders it may be possible to prevent the spreading of such diseases, which, in some instances, almost break up schools.

GERONIMO AND THE CHIRICAHUA APACHES.

The history of Geronimo and his followers for the past year is too familiar to require repetition here. The Indians have surrendered and are now held as prisoners by the War Department. The whole band of Chiricahua Apaches, numbering between 300 and 400 men, women, and children, have recently, by order of the War Department, been removed to Florida. I trust the effect of this action will be to tranquilize Indian matters in Arizona and to remove henceforth any apprehension of disturbances by Indians in that Territory.

COAL ON THE WHITE MOUNTAIN RESERVATION IN ARIZONA.

In referring to this subject in my last annual report, I took the ground that if Congress should decide to segregate the coal-fields from the reservation, it should provide for the sale of the lands thus segregated to the highest bidder, at not less than \$20 per acre; the proceeds to be placed in the Treasury to the credit of the Indians, and draw 5 per cent. interest, to be expended under the direction of the Secretary of the Interior in the education and civilization of the Indians of said reservation. I still entertain the same views upon the subject.

PAPAGO RESERVATION IN ARIZONA.

I renew the suggestions contained in my report for the year 1885, that an agency should be established on the Papago reservation, and means provided for its maintenance; or that provision should be made to give the Indians land in severalty, with permanent title, inalienable for a term of years. There is continual trouble between the settlers and the Indians upon this reservation, and some steps should be taken to obviate this.

MISSION INDIANS IN CALIFORNIA.

I regret to report that the condition of these Indians as regards their land is becoming more unsatisfactory. A case involving the rights of certain Indians residing on the San Jacinto grant has recently been decided adversely to the Indians in the local courts, and other

suits are threatened. Instructions have been given to carry this case to the court of last resort. A special attorney has been appointed to defend the rights of these Indians, and he appears to be earnest, faithful, and able in the discharge of his duties; but there are no funds available for his compensation. Provision should be made for the payment of an amount commensurate with the services required of this attorney.

The bill for the relief of the Mission Indians which passed the Senate July 3, 1884, was again passed in that body February 15, 1886, and was favorably reported in the House of Representatives, but received no further consideration.

ROUND VALLEY RESERVATION, IN CALIFORNIA.

The greater part of this reservation (about nine-tenths) is still occupied by ranchmen and others having a title to about 1,080 acres of land, and claims to improvements of more or less value. The matter was fully presented to Congress in office report of December 16, 1885 (see House Ex. Doc. No. 21, Forty-ninth Congress, first session), and a bill, prepared in this office, providing for allotments of lands in severalty to the Indians residing upon this reservation, for the sale of the surplus lands, and for the extinguishment of the claims of settlers, passed the Senate April 27, 1886, but was not acted upon in the House of Representatives. If some such legislation as this is not secured it will eventually become necessary to abandon the reservation and turn the Indians loose upon the surrounding country. In his annual report for this year Agent Willsey says:

Our lands are still occupied by settlers and trespassers to such an extent that it is almost impossible to increase our stock, or to protect our growing crops from destruction by their stock. Not only do they occupy every part of our range, but that portion of the valley claimed as swamp and overflow lands by Henley Brothers & Corbitt has been completely fenced in, thereby depriving us of the use of a large body of land. I am informed that others contemplate doing the same. The assurance of these people is something incalculable. They seem to think it perfectly right for them to use all of our lands, but we must not trespass upon a foot of land to which they have a shadow of title. It is hard to foretell what will become of this reservation in a very few years if some legislation is not had to protect it from these unscrupulous trespassers.

As long as Congress was in session, and there was a possibility that the House would pass the bill allotting land in severalty, and protecting the balance of the reserve, the Indians were quite jubilant, but now that Congress has adjourned without this bill becoming a law, they are much distressed, fearing that the friends of the trespassers are the cause of its defeat.

I trust that the House of Representatives will see the importance of this measure, and take prompt action thereon at the ensuing session.

KLAMATH RIVER INDIANS IN CALIFORNIA.

I am informally advised that contract has been entered into to resurvey the Klamath River Reservation. When the survey is completed the work of allotting lands in severalty to the Indians, as directed in Department letter of March 26, 1883, will be resumed. It was suspended on account of errors found in the original survey. When the work of making allotments to these Indians shall have been completed, the matter will be presented to the Department, with a view of obtaining legislation suitable to their wants and necessities. As stated in my report of last year, these Indians do not need all the lands at present reserved for their use, but they should be permanently settled, either individually or in small communities, and their lands secured to them by patent, before any portion of the reservation is restored to the public domain.

REDUCTION OF GREAT SIOUX RESERVATION IN DAKOTA.

In December last a bill was introduced in the Senate by Senator Dawes—

To divide a portion of the reservation of the Sioux Nation of Indians in Dakota into separate reserves, and to secure the relinquishment of the Indian title to the remainder.

This bill passed the Senate February 1, 1886, and was favorably reported by the Committee on Indian Affairs in the House of Representatives. It was never referred to this office for report, but in its main features meets with my approval. The rights of the Indians appear to be carefully guarded, and their consent, as provided in the treaty of 1868, is necessary before the provisions of the bill can be carried into effect.

The Great Sioux Reservation, including Crow Creek, contains an area of 21,593,128 acres; the area of the separate reservations provided for in the bill is estimated at 12,845,521 acres, a reduction of 8,747,606 acres. This reduced area allows very nearly 500 acres for each Indian. The Indians can never make use of the immense tract of land belonging to them, while the proceeds of the sale of nearly nine million acres would create a fund which, judiciously and honestly managed, would forever supply them with the means of education and self-support.

The Sioux are an intelligent people, and the younger element among them is rapidly becoming reconciled to a civilized and industrious mode of life. Their advancement is retarded by the older chiefs, who are opposed to any progress that will lessen their own importance. They also desire to live in idleness on their annuities, rather than to receive them as aids to industry and self-support. If these Indians can be brought to accept the provisions of the Dawes bill, with an ample allowance of land in severalty to each Indian, with a large fund for educational purposes, and for the purchase of cattle and agricultural implements, I see no reason why they should not rapidly advance and ultimately become as contented and prosperous as the white communities around them. I earnestly hope that this bill will become a law and that the Indians will cheerfully accept its provisions.

SEMINOLE INDIANS IN FLORIDA.

On the 1st of April, 1886, Frank B. Hagan, esq., of Pine Level, Fla., was appointed a special agent of the Department for the purpose of making further efforts to locate these Indians upon homesteads, as contemplated by the Indian appropriation act approved July 4, 1884 (23 Stats., 95). He accepted the appointment on the 27th of June, 1886, but reported that it would be impracticable to visit the Indians before October, that portion of the State occupied by them being covered with water, and inaccessible before that time.

INTRUDERS AND DISPUTED CITIZENSHIP IN INDIAN TERRITORY.

For many years, in fact most of the time since the removal to and settlement of the five civilized tribes in the Indian Territory, there has been among them a constant source of disturbance by reason of unsettled disputes as to who are justly entitled to be called citizens of the various tribes. Many adventurous white men have entered the Territory and in time have married Indian women and raised families, while

others without such a justification or plea claim citizenship based on long residence and other considerations, so that thousands of persons of white and some of colored blood claim citizenship, which is stoutly disputed by the Indian authorities.

On the 1st of March, 1886, the Supreme Court, in the case of *The Eastern Band of the Cherokee Indians v. The United States and the Cherokee Nation*, rendered the following decision:

If Indians in that State (North Carolina), or in any other State east of the Mississippi, wish to enjoy the benefits of the common property of the Cherokee Nation, in whatever form it may exist, they must, as held by the Court of Claims, comply with the constitution and laws of the Cherokee Nation and be readmitted to citizenship as there provided.

In view of this decision, and with the approval of the Department, Agent Owen was instructed, under date of August 11, 1886, to issue no further certificates to claimants to citizenship in the Cherokee Nation entitling them to remain in the Cherokee country. Hereafter, all persons who enter that country without the consent of the Cherokee authorities will be deemed intruders and treated accordingly.

So far as relates to the large class of persons denominated "doubtful citizens" already in the Cherokee Nation, no basis of settlement has been determined upon, although a plan was submitted to the Department with report of June 22, 1886. This question of determining who are justly entitled to citizenship and who are not is still under the consideration of the Department and the Indian authorities, and I hope that a just and satisfactory conclusion will be reached, which, without the intervention of Congress, will quiet all apprehension on this subject in future.

KICKAPOO ALLOTTEES.

For the last five years attention has been called to the condition of affairs relative to the estates of deceased and female allottees under the provisions of the Kickapoo treaty of June 28, 1862 (13 Stats., 623). I am now able to report that the bill for their relief has finally become a law, and that this subject can now be dropped from the annual reports.

ATTEMPTED SETTLEMENTS BY UNITED STATES CITIZENS IN INDIAN TERRITORY.

In the latter part of October and beginning of November, 1885, a large body of intruders, under the leadership of Couch, again entered the Territory, with the avowed object of settlement on the coveted lands, camping on the banks of the Canadian, near Council Grove, whence, upon the representations of the Department, they were again removed across the line by the military, under the President's proclamation of March 13, 1885.

The President having on July 23, 1885, issued a proclamation declaring the leases made by the Cheyenne and Arapaho Indians void, and directing the removal of the alleged lessees, their cattle, and their employes from the reservation within a specified time, thousands of cattle were driven to graze on the Oklahoma lands. Upon the recommendation of the Department (December 3, 1885,) measures were at once taken by the War Department which, according to official reports on file in this office, resulted in the supposed clearance of all cattle and intruders from Oklahoma. Subsequently, however, in the early spring of the present year, it was ascertained that there were still large numbers of cattle on the Oklahoma lands, and these also were removed by the military.

Upon the receipt of a telegram from the commanding officer at Fort Reno, stating that a number of boomers, horse thieves, &c., were congregated in the Chickasaw Nation just over the Oklahoma line, awaiting a chance to enter Oklahoma, and inquiring whether he should arrest them, I recommended to the Department, on the 17th May last, that the Secretary of War be requested to take immediate action, and on the 3d June the necessary orders were issued from the War Department, resulting in the arrest and expulsion from the Indian Territory of the persons referred to.

MOKOHOKO BAND OF SAC AND FOX IN KANSAS.

In many instances small bands of Indians leave their reservations and lead wandering, vagabond lives in the neighboring Territories and States. Some of these visit their reservations at the time of annuity payments and receive their annuities, while others remain permanently away, preferring to lose their annuities rather than to return. A notable instance of the latter class is the Mo-ko-ho-ko band of Sac and Fox Indians. These Indians belong to the tribe known as Sac and Fox of the Mississippi, and now number about ninety. In December, 1875, they were removed from Kansas to their reservation in the Indian Territory, but nearly all of them soon returned to Kansas, and have since lived vagrant lives, intruding on the lands of citizens. They are at present on what was an old Indian reservation, which is now owned and occupied by citizens who have complained to this office of the intrusion of the Indians and requested their removal. Repeated efforts have been made to induce them to return to their reservation and remain there, whereby they would receive a large amount of accrued annuities as well as be participants in the future annuity payments and other advantages enjoyed by that portion of the tribe living in the Indian Territory; but they have steadily refused to do so.

It appears from the report of United States Indian Inspector Banister, who recently visited them, and from other correspondence in the files of this office, that these Indians are of the very lowest grade of humanity, and are steeped in superstition. They have no rights in the State of Kansas, either of citizenship or property, and are simply a roving band of trespassers, naked and starving, without any means of support whatever, and in a most deplorable and pitiable condition. The support, protection, and even the existence of these Indians, and others similarly situated, demand their removal to the reservation to which they belong, where they can be supplied with the necessities of life, and taught to make their living by agriculture, and where their children can be educated.

The principles laid down in the case of "Standing Bear" (5th Dill, 453) should not, in my opinion, be applied to a people utterly ignorant and devoid of reason, and mere dependents for existence upon the bounty of the Government. These roving bands are the wards of the Government, and are entirely incompetent to comprehend their situation, and it is the duty of the Government to take such action as may be for their best interest, without applying to them the technical principles upon which the writ of *habeas corpus* is based.

The subject of Indians leaving their reservations is causing the office considerable embarrassment, and I believe the matter should be laid before Congress, with a view to securing such legislation as will enable the Department in all cases, with the aid of the military, if necessary, to send to their reservations all Indians absent therefrom without permission from the Department, and to keep them there.

BLACK BOB SHAWNEE LANDS IN KANSAS.

On October 30, 1885, there were filed in this office, for approval of the Department, twenty-five deeds from members of the Black Bob band of Shawnee Indians, or their descendants or representatives, conveying certain lands which had been patented to them, situated on the reservation of the band in Johnson County, Kansas. In consequence of representations made relative to the method of procuring these conveyances, action on the question of their approval was suspended until an investigation could be had as to the sufficiency of the consideration in each case, and as to the methods used to secure the deeds. On December 18, 1885, I instructed United States Special Agent E. E. White to make a full investigation of the subject, which was done. The report and accompanying papers are quite voluminous, consisting of some thousand or twelve hundred pages of closely written matter.

An examination of these papers will be made as soon as possible and the matter will be presented to the Department by special report.

SALE OF IOWA RESERVATION IN KANSAS AND NEBRASKA.

In my last annual report it was stated that the Iowas requested that action as to the disposition of their lands under the act of March 3, 1885 (23 Stats., 351), be delayed until Congress could remedy certain defects in the law, viz, the failure to provide for making allotments to orphans and minors.

The matter was reported to Congress February 8, 1886 (Senate Ex. Doc. No. 70), and a bill covering the case, prepared in this office, passed the Senate May 17, 1883, but was not acted upon in the House of Representatives. No further action under said act will be taken until the necessary legislation is had to remedy the defects complained of by the Indians.

RESERVOIRS AT THE HEADWATERS OF THE MISSISSIPPI.

Recommendation was made last year that Congress be requested to appropriate a certain sum of money to reimburse certain bands of Chippewa Indians for the damage and injury sustained by them in the construction of these reservoirs. It is hoped that the recently appointed commission, in its negotiations with these Indians, has arranged a satisfactory basis upon which full compensation may be made them for every injury they may have sustained by reason of the construction of said reservoirs.

NORTHERN CHEYENNES IN MONTANA.

The disposition of these Indians, located upon the Tongue and Rosebud Rivers, has been a matter of grave concern. The reservation on the Rosebud, created by Executive order of November 26, 1884, did not include the lands occupied by the Indians on Tongue River. The extension of the reservation was strenuously opposed by the citizens in the vicinity, and the reservation was indefinite in its boundaries, and filled with settlers having rights existing prior to the date of the order. The removal of the Indians to some other location did not seem to be feasible, even if desirable.

Under this condition of affairs it was determined to make an effort to locate them upon separate tracts under the provisions of the homestead laws. Preliminary to this work it was necessary to have the lands on

the Tongue and Rosebud Rivers in the vicinity of the reservation properly surveyed. This is now being done under the direction of the General Land Office. When the surveys are completed the Indians will be properly located, if possible, upon homesteads, and the remaining lands on the reservation will be restored to settlement.

WINNEBAGO RESERVATION IN NEBRASKA.

A strong opposition has been recently developed among the Winnebagoes to the passage of the bill now pending before Congress (S. 715) providing for the sale of a portion of the reservation. On February 4 last this office received, by Department reference, a letter from thirty-nine members of the tribe requesting that the influence of the Department be exerted to defeat the passage of the bill, and stating that the tribe had never consented to such sale, but desired that assignments of land in severalty be made to such of its members as had not received any, and further stating that, if all are provided for, there will be no good land to spare, as fully one-half of the reservation is too broken and rough for cultivation. In consequence of the opposition to such sale manifested in the letter referred to, on the 26th of same month I addressed a communication to the Department recommending that the chairman of the Senate Committee on Indian Affairs be requested to see that no final action be taken on the bill in the Senate until the report of the Department should be submitted thereon.

In the latter part of March last I had a conference at this office with a delegation of ten Winnebagoes who had come here for the purpose of discussing the above and other matters of interest to them, from which it appeared that the tribe opposed the proposed sale and desired that allotments be made to all those who had not received any. On March 22 last this office requested the chairmen of the respective Committees on Indian Affairs of the Senate and House of Representatives to allow said delegation of Indians a hearing relative to the provisions of the bill. Since the date of the above-named communications to the chairmen of the committees referred to, no action seems to have been taken on the bill by Congress.

The statement made in my last annual report that the Winnebagoes had expressed a desire to sell a portion of their reservation was based on reports of their agents, who doubtless represented the sentiment of the tribe on the matter, so far as it was then known. I am still of the opinion expressed in said report, that legislation substantially like that recently had for the Omahas (act August 7, 1882,) would be beneficial to the Winnebagoes, who would then have the benefit of and be subject to the laws, both civil and criminal, of the State of Nebraska, and would receive permanent individual titles to their land. It is to be hoped that their consent may yet be given to the sale of a portion of their reservation.

NON-RESERVATION PI-UTES IN NEVADA AND OREGON.

During the past year the agent of the Western Shoshone Agency (Duck Valley Reservation), Nevada, reported the arrival there of some Pi-Utes under the leadership of Paddy Cap, one of the several homeless roving bands of Pi-Utes who have of late been the object of so much solicitude among the friends of the Indians in the East. As they seemed anxious to remain there permanently, directions were at once sent to have them properly cared for. About 60 arrived at the

agency, but when all together the band numbers about 300. Finding that they could live in pleasant relations with the Shoshones, they asked to be permanently settled upon lands adjoining the Duck Valley Reservation on the north, and in order to help them to make a start toward self-support the Shoshones generously and commendably volunteered to assist them in putting in their first crop.

With a view to providing a home for these roving non-reservation Pi-Utes, townships 15 south, ranges 1, 2, and 3 east of the Boisé meridian, in Idaho, were withdrawn from sale and settlement by Executive order dated May 4, 1886, and set apart as an addition to the Duck Valley Reservation, for the use and occupation of Paddy Cap's band of Pi-Utes and such other Indians as the Secretary of the Interior may see fit to settle thereon. The Pi-Ute Indians have been roaming about for years, homeless and helpless, and it is encouraging to find them at last manifesting a disposition to settle down to the pursuits of civilized life. It is probable that all of Paddy Cap's band can be brought together on this reservation and placed under the charge of the Western Shoshone Agency, and possibly some of the other roving bands, seeing the benefits and advantages enjoyed by their brethren in having a permanent home, may be induced to settle there. This is a most encouraging step toward the settlement of the future of this wandering people, and it is my desire and intention to use every means within my power to gather the remaining bands of these Indians upon that reservation or some other in that vicinity.

TROUBLE IN THE SAN JUAN COUNTRY, NEW MEXICO.

By an Executive order dated May 17, 1884, all those portions of townships 29 north, ranges 14, 15, and 16 west, south of the San Juan River, being a portion of the addition to the Navajo Reserve, were restored to the public domain. By reason of this restoration strife sprung up between the Indians and the whites for the occupancy of this country, the Indians unwilling to give way to the whites and the whites determined to settle on the restored lands. The relations between them became so strained as to give rise for a time to the most serious apprehension. Special Agent Parsons was sent to that country last spring to make a thorough investigation of the difficulty growing out of the dispute as to land rights between the Navajo Indians and the white settlers, and as a result he advised the restoration to the Navajo Reservation of all the lands embraced in the aforesaid Executive order as the only permanent solution of the difficulties on the San Juan River. He also advised the appointment of some trustworthy man to repair to the scene of the trouble, 100 miles from the agency, and represent the Indian service. Troops (two companies) were stationed there last spring, and by Executive order of April 24, 1886, the aforesaid lands were restored to the Navajo Reservation. Since then comparative quiet has been established.

EASTERN CHEROKEES, NORTH CAROLINA.

In referring in my annual report for 1885 to the adverse decision of the Court of Claims in the suit of these Indians against the United States and the Cherokee Nation West, it was stated that the case would be taken on appeal to the United States Supreme Court. The Supreme Court, in rendering its decision in March last, already quoted, decreed that if the Cherokees in North Carolina or any other State east of the

Mississippi wished to enjoy the benefits of the common property of the Cherokee Nation they must comply with the constitution of that nation, and be readmitted to citizenship as provided by law.

Looking to the very best interests of these Eastern Cherokees and their settlement in permanent homes, removed from the annoyances to which they are now subjected by reason of intrusion by whites, as well as of anxiety arising from the uncertain tenure of their lands and the difficulty of adjusting their rights thereto (because of their peculiar status in the State), I consider that the best course for these Indians now to adopt, to guard them from such embarrassment in the future, would be to negotiate with the national council of the Cherokee Nation West for their readmission to citizenship in that nation, as decided by the Supreme Court of the United States to be necessary. When satisfactory arrangements shall have been made they can then take the necessary steps for the sale of their lands in North Carolina and their removal to the Indian Territory. This can all be effected, in my opinion, through the regular channels of the Government, without the aid or the connivance of quasi friends or self-constituted agents itinerating through their respective communities or towns, disseminating promises and pledges that neither the Cherokee Nation West nor the Government made or authorized to be made. And this, too, can be done without neglect of the routine of domestic duty or the cultivation of annual crops on the part of most of the Indians. I shall urge the Indians to adopt this course, and shall lay the matter before the Department with a view to the adoption by Congress of the legislation necessary to carry these suggestions into effect.

UTES OF THE UINTAH AND UNCOMPAGHRE RESERVATIONS, UTAH.

These Indians are as a rule wild, intractable, and idle, and consequently have made but little progress in agriculture and education. For some time past their agents have had difficulty in controlling them, and a spirit of insubordination has been manifested.

Early in May last an annuity payment was made the Utes of the Ouray Agency by the then agent, Mr. Carson. The Indians had been previously notified of the date of payment, and with the assistance of the former enrollment, the interpreter, the police, and the chief men of the tribe, the agent had prepared a new roll, revised and corrected up to that date, showing 1,293 persons. This made the per capita share of each \$11.87. After he had finished paying all who presented themselves he found that the shares of 279 Indians, amounting to \$3,356.34, had not been called for, and, as usual in such cases, they were retained by him to be returned to the United States Treasury. On learning of this the Indians who were at hand and had already received their shares peremptorily demanded, with arms in their hands, that these uncalled-for shares be divided amongst them, in addition to what they had already received. To this demand the agent at first refused to yield, but as the Indians became insubordinate and threatening, and he believed that his life and the lives of the agency employes were in danger, he consented and paid the entire amount to them, which made an additional per capita payment to those who were on the ground of \$3.31.

In consequence of the threatening attitude of the Utes at Ouray Agency, as set out in a letter from Mr. Carson, late agent there, under date of April 16, 1886 (transmitted by the Department to Lieutenant-General Sheridan), Maj. Edward P. Bush, of the Sixth Infantry, in pur-

suance of General Sheridan's orders, was detailed to make an investigation of the condition of affairs at the agency. The report of Major Bush, and a report of the inspection of said agency by Inspector Robert S. Gardner, were received by me, by Department reference, dated the 17th of June, 1886. It appeared from these reports and other correspondence, and from personal interviews with Mr. Carson and Special Agent Parsons, who had just returned from the agency, that the disposition and behavior of the Indians had been such as to cause great uneasiness amongst the employés of the Government residing with them, and fears were entertained that, unless they were restrained by the presence of a powerful military force, their vicious propensities might lead them to acts of violence. The attitude of the Indians was shown to be defiant and dictatorial towards the Government officials and employés. Being remote from the settlements they had seen but little of civilized life, and did not seem to know or dread the power of the Government. Mr. Carson stated that he was informed by the Indians that the Mormons had told them that the Indians and Mormons combined could successfully resist the Government troops. Major Bush recommended that a four-company post be established at the junction of the Du Chesne and Uintah Rivers or in Ashley Valley. Inspector Gardner was of opinion that at least five or six companies should be stationed at or near the agency, in view of the wild and almost ungovernable element existing among the younger and impetuous men of the tribe.

From Special Agent Parsons it was learned that the White River Utes of the Uintah Reservation were also showing signs of restlessness, if not insubordination, the head chief of whom stated that they would no longer submit to having the Meeker pensions paid out of their annuity money. These White River Utes will be remembered as the perpetrators of the Meeker massacre a few years since.

On the 23d of June, 1886, I made a report to the Department, recommending that the subject be laid before the War Department, with request for the immediate establishment of a military post at such point as should be found upon investigation to be most suitable to meet the requirements of the situation, the garrison to be sufficiently strong to maintain order and enforce obedience on the part of the Indians. As a result of this, on August 7, 1886, Special Order No. 99 was issued from headquarters Department of the Platte, Omaha, Nebr., establishing a permanent cantonment, to be known as Fort Du Chesne, in the vicinity of the Ouray Agency, and near the confluence of the Du Chesne and Uintah Rivers, Utah. It is situated about 3 miles above the mouth of the Uintah, on the road between the two agencies. Six companies were designated for the garrison.

Under date of August 16, 1886, United States Special Agent E. E. White, then in charge of both agencies, transmitted to this office a copy of his letter bearing same date to General Crook as to excitement among the Indians on rumors of the approach of the troops; in two letters from him to this office, each dated the 24th of August, 1886, it was stated that the Indians of both agencies were greatly excited by the marching of General Crook with troops into their reservation on the 20th of that month, but that the excitement had almost entirely subsided on their meeting and conversing with the troops. On September 11, 1886, I received, by Department reference, from the Acting Secretary of War a copy of the report of the commanding officer at Fort Du Chesne in regard to his interview with the chief and headmen of the Indians on said reservations, in which he says that the Indians seemed well satisfied with the interview, but were much excited and prepared

to fight the day previous on the approach of the troops, but that no trouble was then apprehended. On the 13th of September, 1886, I received, by Department reference, from the Acting Secretary of War a copy of a report from General Crook, in which he states that he found the Indians in a state of great excitement, and that they had been laying in supplies of ammunition, and had sent their families into the mountains, and that in an interview with some of them he told them to tell the others that the troops were there for no hostile purpose.

I believe the garrison of Fort Du Chesne is sufficiently strong to hold the Indians under complete control, and to enable the new Indian agent in charge of both of said agencies to enforce the rules and regulations of the office; but if it is found that the present force is not sufficiently large, I will report the fact to the Department and recommend that additional troops be requested of the War Department. The agent will be instructed to use every endeavor possible to promote the advancement of the Utes in education and agriculture, and to endeavor as far as possible to avoid irritating them or giving them any just ground of complaint, but also to act with firmness in his intercourse with them, and to give them to understand plainly that all acts indicative of insubordination must immediately cease.

JOSEPH'S BAND OF NEZ PERCÉS, WASHINGTON TERRITORY.

These Indians, who were removed from the Indian Territory in June, 1885, have been permanently located on the Colville Reservation, in a fertile valley about four miles from the Nespilem mills and school-house. The agent reports that they are much pleased with their location, and expresses the belief that they will be self-supporting after the harvest next summer, if meantime they are supplied with wagons and cows.

FISHERIES ON THE COLUMBIA RIVER, WASHINGTON TERRITORY.

By the treaty of June 9, 1835 (12 Stats., 951), the Yakama Nation, in ceding lands in Washington Territory, reserved certain rights and privileges—among them the right of way with free access from their reserve to the nearest public highway; also the right, in common with citizens of the United States, to travel upon all public highways, the exclusive right of taking fish in all the streams running through or bordering on their reservation, and also the right of taking fish at all usual and accustomed places, in common with citizens of the Territory, and of erecting temporary buildings for curing fish. One of the usual and accustomed places referred to is at or near the Dalles of the Columbia River, known as the Tumwater salmon fisheries. Indeed it was the principal fishery resorted to by the Indians at the date of the treaty, and from it, it is alleged, they have, for untold generations, obtained almost their entire subsistence. In 1864 and 1866 the lands in the neighborhood, as well as the lands embracing these fisheries, were sold to settlers under the pre-emption laws.

In 1882, one Mr. Taylor, who had purchased lands, leased the fisheries to certain whites, and in consequence of this troubles and disputes arose, which it was not difficult to see would end in disaster to the Indians unless some protection was afforded them. To test the right of the Indians to ingress and egress, Mr. Taylor determined to close the only means of approach by land to the fisheries. It was proposed to purchase the land from Mr. Taylor, but this was declined by the Department for the reason that the Indians already possessed, under that treaty, all the rights they would acquire by purchase.

The whole difficulty as to the rights of the Indians in the fisheries on the Columbia hinges upon the construction to be placed upon the language of the third article of the aforesaid treaty. If they have the right to fish there, it would certainly seem that they retained the right of access thereto by land, that being the only practicable means or way of approach. So great has been the effort of the settlers to deprive these Indians of their rights in these fisheries that the aid of the Department of Justice was invoked in May, 1882, June, 1884, and May, 1885, to render needful protection to these Indians in their fishing privilege. The matter is now before the district court for Washington Territory, at Yakima City, for adjustment.

The same statement may be made respecting the importance of these fisheries to the confederated tribes of Middle Oregon, known as the Warm Springs Indians. By treaty made November 15, 1865 (14 Stats., 751), they relinquished the right to take fish, &c., which they expressly reserved in their treaty of June 25, 1855 (12 Stats. 964), in language strikingly similar to that of the Yakama treaty of 1855. These Indians have incessantly protested against the ratification or observance of this treaty of 1865, and there is sufficient testimony before this office to satisfy this Department that the Government should not be too exacting in its enforcement. Arrangements have been made by Agent Wheeler by which the Warm Springs Indians have been granted access to the fisheries on the Columbia River, but this privilege is limited to one year.

Arrangements have also been made, through military channels, whereby the Warm Springs Indians may not only return to their fishing grounds upon the Cascades Canal Reservation, which by reason of maltreatment from white men they had abandoned, but may locate their camp one mile below the foot of the canal, where a detail of troops will be furnished during the fishing season for the maintenance of order and discipline. The protection of the United States authorities is thus assured them whenever they may desire to return to said fisheries.

Very respectfully, your obedient servant,

J. D. O. ATKINS,
Commissioner.

The Hon. SECRETARY OF THE INTERIOR.

REPORT OF THE COMMISSIONER OF THE GENERAL LAND OFFICE.

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
Washington, D. C., October 7, 1886.

SIR: I have the honor to submit herewith the annual report of the General Land Office for the fiscal year which ended June 30, 1886.

In my previous report I referred to the imperative need of reform in the administration of the public land laws, to the end of protecting the public interest rather than ministering to the advantage of speculation and monopoly, private or corporate. With the means at my command, and in a spirit of justice to the Government and fairness to the public, I have sought to inaugurate and carry out such reform.

The steady purpose in which I have endeavored to reflect the aims approved by all good men has been the protection of the public domain.

and its preservation for inhabitancy by actual cultivators, to whom it rightfully belongs. No higher duty could inspire nor more important public service demand the resolute and devoted efforts of an official.

I found this great estate of the people rapidly wasting under a system in which the Government appeared to have no place except as an agency for its own despoilment. It has been my endeavor to establish and maintain the principle that the Government has a deep interest in its public lands. I found illegality and fraud intrenched in the system and defended in the practice of the land department. It has been the object and purpose of all my efforts to maintain the integrity of the laws and to secure the rights of actual settlers to actual homes on the public lands. The evidences of "widespread, persistent land robbery" laid before you in my last report were furnished by the officers and agents appointed by the last administration. The developments of the past year under the agencies of the new administration have justified every word said in that report. The work of correcting the evils pointed out and known of all men is not a holiday pastime. It was not anticipated by me that it would be such when I entered upon it. On the contrary, it was expected then, as it has since proven to be, a work requiring intense labor and sleepless vigilance. By the devotion to it of such ability as I possess, with the cordial co-operation and assistance of the officers of this bureau, and guided by the wisdom of the superior authority of the Department, this work has been commenced and carried on during the year, with whatever of successful result the accompanying pages may show.

ABSTRACT OF DISPOSALS AND RECEIPTS.

The sales, entries, and selections of public land under the various acts of Congress relating thereto embrace 20,991,967.18 acres, and of Indian lands 1,132,596.74 acres, making a total of 22,124,563.92 acres; being an increase over the year 1885 of 1,129,050.34 acres, and a decrease, as compared with the fiscal year 1884, of 5,406,606.08 acres.

The receipts from the disposals of public lands are \$7,412,767.31; from sales of Indian lands, \$1,607,729.63; a total of \$9,020,496.94, being an increase as compared with the year 1885 of \$400,898.62, and a decrease as compared with the year 1884 of \$3,758,633.39; to which is to be added \$10,587.40 received for certified copies of records furnished by the General Land Office, making the total receipts for the year from all sources \$9,031,084.34.

The following is a statement in detail:

CASH SALES.

	Acres.
Public sales.....	589.15
Private entries.....	632,221.36
Pre-emption entries.....	2,279,218.39
Timber and stone land entries.....	50,693.63
Desert-land entries.....	754,688.99
Mineral-land entries.....	22,980.37
Coal-land entries.....	8,986.71
Town-site entries.....	960.00
Excesses on homestead and other entries.....	19,473.24
Abandoned military reservations.....	3,686.20
Total	3,773,498.03

MISCELLANEOUS.

Homestead entries (original)	9,145,135.76
Timber-culture entries (original).....	5,391,309.38
Entries with military bounty-land warrants.....	28,016.05

	Acres.
Entries with agricultural college scrip	159. 18
Entries with private land scrip (Supreme Court).....	1, 319. 92
Entries with Sioux half-breed scrip.....,.....	552. 00
Entries with Choctaw scrip.....	80. 00
Entries with Chippewa half-breed scrip.....	80. 00
Entries of lands for agricultural college purposes	19, 472. 02
Donation entries	1, 753. 84
Railroad selections.....	2, 311, 537. 30
Wagon-road selections	440. 00
State selections—school, swamp, and internal improvements	318, 613. 70
Total area of public land entries and selections	20, 991, 967. 18

INDIAN LANDS.

	Acres.
Cherokee school lands.....	340. 25
Miami lands	200. 00
Omaha lands	14, 429. 26
Osage ceded lands	526. 24
Osage trust and diminished reserve lands.....	1, 033, 825. 36
Sioux lands.....	40, 179. 90
Ute lands.....	43, 095. 73
	1, 132, 596. 74
Making a grand total of.....	22, 124, 563. 92

The foregoing does not include the following entries, the areas of which have previously been reported in the original entries of the respective classes:

	Acres.
Commuted homesteads (section 2301 R. S.).....	720, 415. 72
Commuted homesteads (act June 15, 1880)	144, 713. 46
Final desert-land entries	150, 328. 86
Final homestead entries.....	2, 663, 531. 83
Final timber-culture entries.....	141, 693. 97
Total areas previously reported.....	3, 820, 743. 84

In addition to the foregoing, and not included in the total areas of current sales, entries, and selections, are pre-emption, homestead, and miscellaneous filings, viz:

Number of pre-emption filings.....	50, 676
Number of soldiers' declaratory statements.....	2, 391
Number of filings upon Indian lands.....	6, 772
Miscellaneous filings	2, 621
Total.....	62, 460

The area of land embraced in these filings aggregates 8,432,000 acres.

CASH RECEIPTS.

From cash sales.....	\$5, 757, 891 06
From homestead fees and commissions.....	986, 873 62
From timber-culture fees and commissions.....,.....	484, 766 00
From military bounty-land warrant locations	843 00
From fees on scrip locations.....	11 00
From pre-emption and other filings	148, 375 25
From fees for reducing testimony to writing.....	435 78
From fees on donation claims.....	55 00
From fees on state selections	4, 616 12
From fees on railroad selections.....	28, 895 48
From fees on wagon-road selections.....	5 00
Total receipts from public lands.....	7, 412, 767 31
Receipts from disposal of Indian lands.....	1, 607, 729 63
From fees for transcripts of record furnished by General Land Office..	10, 587 40
Total.....	9, 031, 084 34

ENTRIES AND FILINGS.

The total number of entries and filings made during the year is 249,808, aggregating 34,377,307.76 acres; an increase of 8,284 entries and filings over the year 1885, and a decrease of 37,004 as compared with the year 1884. The number of entries and filings posted on the records is 325,914, a decrease as compared with the year 1885 of 73,072.

Fifteen thousand five hundred and fifty-six homestead, timber-culture, and other contests, exclusive of pre-emptions, were examined and acted upon. Two hundred and twenty-four cases were confirmed by the board of equitable adjudication.

CASH SALES.

The number of private cash entries is 4,295, embracing 631,981.36 acres; an increase of 158,957.53 acres. Final proof was made upon 15,712 pre-emption claims, embracing 2,279,218.39 acres, being a decrease of 32,078.32 acres; 865,129.18 acres are embraced in commuted homesteads, a decrease of 262,314.57 acres.

The total cash sales, including land sold at public and private sale, pre-emption, commuted homestead, mineral lands, timber and stone lands, &c., amount to 4,789,016.07 acres. The amount received from cash sales is \$5,757,891.06, an average of a fraction over \$1.20 per acre, or \$1.38 +, exclusive of original desert-land entries.

PUBLIC SALES.

Thirteen tracts of land, embracing 589.15 acres, were sold at public sale in the various land districts at an average price of a fraction less than \$1.60 per acre.

HOMESTEADS.

The number of original homestead entries made during the year is 61,638, embracing an area of 9,145,135.76 acres; an increase, as compared with the year 1885, of 10,761 entries and 1,729,250.23 acres.

Final proof was made on 19,356 entries, embracing 2,663,531.83 acres; a decrease of 2,710 entries and 369,147.28 acres. Two thousand six hundred and twenty-one soldiers' declaratory statements were filed, covering 419,360 acres.

TIMBER-CULTURE ENTRIES.

Thirty-four thousand nine hundred and ninety-six timber-culture entries were made, embracing 5,891,309.38 acres; an increase of 4,010 entries and 636,303.81 acres. Final proof was offered on 1,036 entries, embracing 141,693.97 acres.

PRE-EMPTION.

Fifteen thousand seven hundred and twelve pre-emption entries were made during the year, embracing an area of 2,279,218.39 acres; a decrease of 88 entries and 32,078.32 acres. Seven hundred and fifty individual contests were decided. The number of pre-emption cases remaining unacted upon at the close of the fiscal year was 36,460.

DESERT LANDS.

Two thousand five hundred and eighteen desert-land entries were made, embracing 753,688.63 acres; a decrease of 248 entries and 174,561.43 acres. Final proof was made on 487 entries, embracing 150,388.86 acres.

TIMBER AND STONE LAND ENTRIES.

Four hundred and twenty-nine entries, embracing 50,693.62 acres, were made under the timber and stone land act of June 3, 1878, in the States of California and Oregon and Washington Territory (to which states and territory and the State of Nevada the act is only applicable), being a decrease of 598 entries and 88,608.31 acres as compared with 1885.

AGRICULTURAL PATENTS.

The number of public and private cash entries under the homestead, pre-emption, timber-culture, timber-land, and desert-land laws approved for patenting is 54,566.

MINERAL LANDS.

Thirteen hundred and fifty-one mineral entries, embracing 23,211.21 acres, were made, and 1,389 mineral applications filed.

Two hundred and thirty-one adverse claims were filed against entries of mineral lands.

There were 77 coal entries, embracing 10,167.37 acres, and 665 coal filings.

The above is a decrease of 305 entries and 13,290.59 acres of mineral lands, a decrease of 66 mineral applications, and an increase of 33 in the number of coal-land entries, with an increased area of 4,212.24 acres.

There was also an increase of 50 in the number of adverse claims filed.

Eight hundred and two *ex parte* cases have been examined, 91 contest cases decided, 675 lode and placer claims patented, and 15 coal patents issued.

Twenty-six hundred and fifty-eight unexamined cases are on file, and 2,184 examined and suspended cases await further action by the claimants. Three hundred and fifty-three contests remain undisposed of.

STATE SELECTIONS.

State selections were made under educational and internal-improvement grants aggregating 318,615.70 acres, an increase of 19,374.02 acres over the year 1885.

The following state selections were approved:

	Acres.
School, indemnity.....	5,582.67
Agricultural college.....	53,266.34
Penitentiaries.....	6,038.66
Public buildings.....	2,758.29
Universities.....	1,080.00
Salt springs.....	639.93
Total.....	69,365.89

TOWN SITES.

Two town sites, embracing 960 acres, were entered during the year, and there were 394 sales of town lots. Ten town sites and 343 town lots were approved for patent.

ACCOUNTS.

Seven thousand one hundred and fifty-eight accounts were examined and audited, covering \$19,893,985.33; an increase of 2,742 accounts and \$10,089,184.44 as compared with the previous year.

The adjusted accounts embrace receipts amounting to \$17,767,058.14 and disbursements to the amount of \$2,126,927.19.

CERTIFICATES OF DEPOSIT ON ACCOUNT OF SURVEYS.

The amount covered by certificates of deposit on account of surveys examined and accepted in payment for public lands during the year is \$106,163.90.

The amount deposited for surveys under the individual-deposit system was \$60,875.22. There were also deposits made by railroad companies, to reimburse the United States the costs of survey of lands selected by them, amounting to \$115,097.21.

REPAYMENTS.

Nine hundred and eleven repayment claims for lands erroneously sold, amounting to \$53,168.01, were adjusted and approved.

STATE-FUND ACCOUNTS.

The amount reported to the First Comptroller as accruing to the several states entitled by acts of admission into the Union to 5 per cent. of the net proceeds of sales of the public lands is \$112,773.25.

MAPS.

The map of the United States has been compiled and 3,500 copies published. Maps of California, Wisconsin, Missouri, and Florida were revised and published. New maps of Nevada, Colorado, New Mexico, and Louisiana have been compiled and traced. New maps of Arkansas, Montana, Arizona, and Indiana are in process of construction. All the new maps were compiled from new projections.

SWAMP LANDS.

The swamp-land selections were 1,201,535.83 acres, making a total of 75,748,385.76 acres claimed by states under the swamp-land grant up to the close of the fiscal year. Lists embracing 171,978.85 acres were approved, making the total thus approved 58,792,965.46 acres. Patents were issued for 341,594.96 acres. The total area patented under the act of 1850, or certified under the act of 1849, is 56,692,520.61 acres. Cash indemnity claims amounting to \$77,529.52 were adjusted and allowed, a decrease of \$3,161.86. Indemnity lands were patented to the amount of 20,664.85 acres, an increase of 17,423.05 acres. The total cash indemnity allowed since the passage of the indemnity acts is \$1,438,473.05, and the total amount of indemnity land patented is 572,390.48 acres.

Five special agents were employed in making examinations in the field of lands claimed under the swamp grant and in representing the Government at the taking of testimony respecting the character of land claimed.

PRIVATE LAND CLAIMS.

Ten private land claims have been patented during the year in Louisiana and Florida. Patents have issued on twenty-nine donation claims in Oregon and New Mexico. Six hundred and forty-one Indian claims have been patented. Nineteen private land-scrip locations were approved for patent and twenty-two New Mexico donation claims have been canceled. Patent has also issued to the city of Fort Smith, Ark., for lands within the late Fort Smith military reservation granted to said city by act of Congress of May 13, 1884.

RAILROAD SELECTIONS.

Five railroad patents were issued during the last fiscal year, embracing 100,823.02 acres; a decrease, as compared with the previous fiscal year, of 1,053,126.93 acres. Lists of selections are on file amounting to 16,571,299.70 acres, an increase of 2,298,241.89 acres.

The number of *ex parte* claims within railroad limits pending at the close of the fiscal year was 4,540, of which 923 have received some action and 3,617 have not been reached for examination. Ninety-two and seventy-two hundredths miles of land-grant railroad were reported as constructed, making the total reported to June 30, 1886, 17,724.06 miles.

SURVEYS.

The public surveys reported during the year embraced the following areas :

	Acres.
Surveys of public lands	1,929,686.82
Resurveys of public lands	313,481.96
Resurveys of Indian lands	59,207.89
Total	2,302,376.67

Very respectfully,

WM. A. J. SPARKS,
Commissioner.

Hon. L. Q. C. LAMAR,
Secretary of the Interior.

REPORT OF THE COMMISSIONER OF RAILROADS.

DEPARTMENT OF THE INTERIOR,
OFFICE COMMISSIONER OF RAILROADS,
Washington, D. C., October 20, 1886.

SIR: I have the honor to submit the following report of the condition of the railroad companies under the supervision of this Bureau. The books and accounts of those companies were carefully examined by competent accountants, and their railroad property inspected as carefully as practicable. The results of those examinations and inspections are exhibited in the following statements:

UNION PACIFIC RAILWAY COMPANY.

This company was formed on the 26th of January, 1880, by the consolidation of the Union Pacific Railroad Company, the Kansas Pacific Railway Company, and the Denver Pacific Railway and Telegraph Company. The length of the first, from Council Bluffs to a point 5 miles beyond Ogden, is 1,038.51 miles, which was "aided," except the part east of the Missouri River. That of the second, from Kansas City to Denver, is 639.51 miles, of which 393.9425 miles measured from the initial point was "aided." That of the third, from Denver to Cheyenne, is 106 miles, "unaided." The length of the company's road, including its eight branches, is 1,835.17 miles. It operates besides, nineteen auxiliary roads, the aggregate length of which is 2,687.08.

I inspected the Nebraska and Kansas divisions of the road in August, accompanied by their very competent superintendents, Messrs. Dor-

rance and Brinkerhoff. The state of my health prevented my going beyond Cheyenne, therefore Mr. W. M. Thompson, who was examining the accounts of the Central Pacific Railroad Company, was instructed to inspect the parts of the Union and Central Pacific west of that point, on returning from San Francisco. The track, bridges, culverts, workshops, round-houses, stations, tanks, were found to be in excellent condition. The work I saw in progress last summer has improved the road greatly. It has now an extremely good surface, the road-bed sufficiently raised and the ditches ample; the ties well leveled and the rails (steel) accurately and firmly laid, constituting this a first-class road, and proving the efficiency of the present management. The only want is that of proper ballast, which the country does not furnish. The ample workshops are well placed, well equipped, and manned with skilled workmen.

The improvement of the Union Pacific Railway during the year is further indicated by the following account of expenditures for that object:

For right of way and real estate.....	\$127,718 78
Repairing track.....	14,053 47
Bridging, piling, and trestling.....	352,264 28
Buildings for all purposes.....	51,210 37
Fences.....	1,100 24
Tanks.....	1,434 98
Machinery.....	534 31
	<hr/>
	548,317 31

At the end of the fiscal year the company owned 350 locomotives, 313 of which were provided with Westinghouse brakes. Of these, 39 had 8 driving-wheels, 97 had 6, and 177 had 4. It had 285 passenger cars, 7,466 freight cars, and 184 road and miscellaneous cars, snow-plows, sweepers, and steam shovels.

In 1885, at the company's coal mines at Carbon, Rock Springs, Almy, Grass Creek, and Twin Creek, 817,114 tons of coal were mined and sold at a net profit of \$106,555.02.

The company received during the fiscal year patents for 16,493.47 acres of land, making the total number of acres received 3,856,835.85. One million fifty thousand four hundred and eighty-five and eight hundredths acres were sold during the year; making the entire land sales amount to 12,260,163.64 acres, at the average price per acre of \$2.54 for Union Pacific, \$3.51 for Kansas Pacific, and \$4.37 for Denver Pacific land. The sum of \$21,667,734.70 has been paid and \$13,986,939.16 are due on these sales.

Financial condition June 30, 1886.

LIABILITIES.	
First-mortgage bonds.....	\$40,809,000 00
Interest on same, accrued and due.....	1,058,260 00
Interest on same, accrued, not due.....	170,500 81
United States subsidy bonds.....	33,539,412 00
Interest on same, paid by United States.....	37,194,295 06
Other funded debt.....	40,177,677 50
Interest on same, accrued and due.....	201,677 90
Interest on same, accrued, not due.....	594,738 31
Dividends unpaid.....	71,567 77
Bills payable.....	2,450,000 00
Accounts payable.....	786,507 94
Pay-rolls and vouchers.....	2,378,554 13
Called bonds.....	77,000 00
	<hr/>
Total debt.....	159,439,999 09
Capital stock.....	60,000,000 00
	<hr/>
Total stock and debt.....	220,307,799 09

ASSETS.

Cost of road, fixtures, and equipments.....	\$160,112,017 53
Land contracts, land cash, &c.....	18,383,340 76
Fuel, material, and stores on hand.....	2,164,458 57
Cash on hand.....	1,288,682 31
Company's stocks and bonds owned by company.....	896,718 17
Other stocks and bonds.....	38,831,812 53
Miscellaneous investments.....	751,414 57
Advances payable in stocks and bonds.....	4,271,278 99
Sinking funds in hands of trustees.....	184,002 35
Bills receivable.....	903,291 92
Accounts receivable.....	4,476,018 13
Due from other companies on account of traffic.....	78,091 65
Repaid the United States*.....	21,604,141 89
Total assets.....	253,945,269 37
Surplus.....	33,637,477 37

Amount due the United States for 1885 from the Union and Kansas Divisions.

In the following statement a sum equal to 25 per cent. of the net earnings of the bridge at Omaha is included as due to the Government, on the decision of the Supreme Court in the case of the United States *v.* The Union Pacific Railroad Company, October term, 1878 (see vol. 99, p. 419), that the net earnings of its road "must be regarded as embracing all the earnings and income derived by the company from the railroad proper, and all the appendages and appurtenances thereof, including its ferry and bridge at Omaha, its cars, and all its property and apparatus legitimately connected with its railroad."

A sum equal to 25 per cent. of \$64,182.39 (a part of the company's Pullman-car earnings), and also of two debits to earnings—the first of \$10,000, termed "closing out of Laramie rolling-mill," and the second "undercharges on coal," \$62,273.54, both being properly debits to the income account, is likewise included.

It was stated in my report of last year that in the accounts of the Kansas Pacific road the earnings are divided as if the business per mile of the aided and unaided parts was equal, although the former is much greater than the latter. In consequence (I presume) of a correspondence between Mr. Adams and me on the subject, these accounts for the last year are correct, and show the net earnings of the subsidized part of the road, 5 per cent. of which are due to the United States. The Government gains \$32,672.05 by this correction.

* Reports of the Treasury Department show settled accounts and money paid into the Treasury, June 30, 1886, as amounting to \$20,674,414.17, or \$929,727.72 less than the amount claimed by the company, as follows:

Transportation applied to interest account.....	\$14,420,499 39
Cash paid and applied to interest account.....	283,162 99
Total payments to interest account.....	\$14,703,662 38
Transportation applied to sinking-fund account.....	4,549,137 33
Cash paid and applied to sinking-fund account.....	1,421,714 46
Total payments to sinking-fund account.....	5,970,851 79
Total payments by the company.....	20,674,414 17
The credits of the company are increased, however, by accumulated interest on sinking-fund investments.....	448,500 02
Total credits June 30, 1886.....	21,123,014 19

UNION DIVISION.

EARNINGS.

United States:		
Passenger.....	\$66,056	21
Freight	159,086	12
Extra baggage.....	5	00
Mail.....	446,030	14
Express	695	16
Telegraph	2,773	55
		<hr/>
		\$674,646 18
Commercial:		
Passenger*	2,664,668	23
Freight	7,835,860	66
Extra baggage.....	39,166	88
Express	377,633	87
Telegraph	9,838	42
Company freight	430,092	18
Miscellaneous†.....	183,578	29
		<hr/>
		11,540,838 53
Total earnings		<hr/>
		12,215,484 71

OPERATING EXPENSES.

Conducting transportation	1,452,917	94
Maintenance of way	929,357	60
Motive power	1,962,315	41
Maintenance of cars.....	574,348	31
General expenses	1,071,455	15
		<hr/>
		5,990,394 41
Surplus earnings		<hr/>
		6,225,090 30
Deduct:		
Interest on first-mortgage bonds	\$1,633,740	00
New construction	16,056	55
New equipment.....	121,414	65
		<hr/>
		\$1,771,211 20
Net earnings under the act of May 7, 1878		<hr/>
		4,453,879 10

DUE THE UNITED STATES.

Five per cent. of net earnings.....	222,693	96
One-half of amount charged for Government transportation	337,323	09
		<hr/>
Total applicable to interest account		560,017 05
One-half of amount charged for Government transportation	337,323	09
Cash payment required by section 4 of the act of May 7, 1878.....	216,129	64
		<hr/>
Total applicable to sinking fund account		553,452 73
Total equal to 25 per cent. of net earnings		<hr/>
		1,113,469 78

* Exceeds amount reported by company \$64,182.89, being 55.35 per cent. of \$115,958.25 income from Pullman sleeping-cars. Earnings apportioned to aided and non-aided road on basis of sleeping-car mileage.

† Exceeds amount reported by company \$72,273.54, made up as follows:

“Loss closing out Laramie rolling-mill”; deficit in material account, debited to earnings (see letter of Secretary of the Interior, March 24, 1885) . \$10,000 00

“Undercharges on coal ” 62,273 54

This amount was debited to earnings in order to relieve the operating department. During the strikes at the mines last year the coal mined was insufficient to meet the demands of the operating department and the company’s commercial coal trade. In order to maintain the commercial trade the mined coal was sold and the operating department was supplied by purchase from off the line, at an additional expense to the operating department of \$62,273.54.

It is submitted that the company’s coal should have been used on the road, and that bought “off the line” used by its customers.

KANSAS DIVISION—AIDED ROAD.

EARNINGS.	
United States:	
Passenger	\$14,386 61
Freight.....	2,609 09
Extra baggage.....	7 18
Mail.....	76,682 43
Express	
Telegraph (deduction)	20 60
	<hr/>
	\$93,664 71
Commercial:	
Passenger*	878,463 05
Freight	2,632,936 73
Extra baggage.....	9,233 30
Express	67,724 53
Telegraph	2,679 86
Company freight.....	74,246 25
Miscellaneous.....	56,338 79
	<hr/>
	3,721,622 51
Total earnings.....	<hr/>
	3,815,287 22
OPERATING EXPENSES.	
Conducting transportation.....	\$462,298 11
Maintenance of way	468,407 35
Motive power	486,675 25
Maintenance of cars	151,795 74
General expenses	322,535 38
	<hr/>
	1,891,711 83
Surplus earnings.....	<hr/>
	1,923,575 39
Deduct:	
New construction	\$6,404 59
New equipment.....	33,433 02
	<hr/>
	\$39,837 61
Net earnings under the act of July 1, 1862.....	<hr/>
	1,883,737 78
DUE THE UNITED STATES.	
Five per cent. of net earnings of aided road.....	\$94,186 89
One-half of amount charged for Government transportation on aided road	46,832 36
	<hr/>
Total	141,019 25
TOTAL DUE FROM UNION PACIFIC RAILWAY COMPANY.	
Account Union Division	\$1,113,469 78
Account Kansas Division	141,019 25
	<hr/>
Total	1,254,489 03
Statement showing expenditures for new construction and new equipment for the aided roads during the year ending December 31, 1885.	
PARTICULARS OF EXPENDITURES FOR NEW CONSTRUCTION.	
UNION DIVISION—AIDED ROAD.	
Right of way, buildings and machinery at Omaha.....	\$5,572 81
Eating-house at Green River	3,100 00
New siding $\frac{1}{4}$ mile west of Gilmon	4,274 52
Coal-chutes at Rawlins, Wyo.....	16,893 85
Water-supply at Rock Springs	381 08
Fencing at sundry points on Nebraska Division	1,100 29
	<hr/>
	\$31,322 55
LESS.	
Receipts from sales during year.....	15,266 00
	<hr/>
Total	16,056 55

* Exceeds amount reported by the company \$10,030.98, being 8.66 per cent. of \$115,958.25 sleeping-car earnings.

KANSAS DIVISION—AIDED ROAD.

Right of way, side-track and machinery at Armstrong.....	\$3,354 59	
Real estate, Solomon City	50 00	
St. James street viaduct, Kansas City, Kana., three-fourths of Union Pacific Railway's proportion of cost	3,000 00	
		\$6,404 59
Total aided road		22,461 14

PARTICULARS OF EXPENDITURES FOR NEW EQUIPMENT.

1 steam derrick and extra tank.....	\$9,188 00
30 coal and 1 flat cars.....	14,436 00
20 Pocatello transfer trucks	3,193 84
Air-brakes on locomotives and tenders	52,356 78
Air-brakes on cars	133,043 64
	212,218 26
CREDIT.	
By transfer to "operating expenses"	36,255 00
Total charge to "new equipment".....	175,963 26

Apportionment, based on train mileage.

	Train miles.	Per cent.	Amount.
Union Division.....	4,754,000	69	\$121,414 05
Kansas Division, aided road	1,303,619	19	33,423 02
Kansas Division, non-aided road.....	435,847	6	10,587 90
Cheyenne Division.....	314,961	5	8,798 14
Leavenworth Branch	53,148	1	1,759 03
Total.....	6,861,635	100	175,963 26

Statement of amounts charged the United States for transportation, year ending December 31, 1885.

Amount retained by Treasury Department, authorized by United States courts :*	
Union Division	\$674,646 18
Kansas Division, one-half amount charged on aided road	46,832 36
Total.....	721,478 54

Funded debt.

The funded debt of the Union Pacific Railway Company June 30, 1886, was \$115,048,189.50 as against \$116,441,797 the year before, a net decrease of \$1,393,807.50, as shown by the statement below.

In order to provide the funds necessary for the reconstruction of the bridge across the Missouri River at Omaha, the company began, in 1885, the issue of a new gold five per cent. bond, due in 1906, secured by second mortgage on the bridge. The total issue of these bonds is limited to \$1,250,000, and no more than \$227,000 can be certified by the trustees in any one year.

* See case 1291, United States Supreme Court, October term, United States v. Central Pacific Railroad Company.

Class of bonds.	Term of bonds.		Rate of interest.	Amount of bonds outstanding.		Difference.		Lien on—
	Years.	Date of maturity.		June 30, 1886.	June 30, 1885.	Increase or decrease.	Amount.	
Union Pacific Railroad Company.								
Union Pacific, first mortgage.....	30	1896-1899	Per cent.	\$27,229,000 00	\$27,229,000 00	.....	.....	Road and franchise, Omaha to Ogden.
United States subsidy, second mortgage.	30	1896-1899	6	27,236,512 00	27,236,512 00	.....	.....	Do.
Land-grant mortgage.....	20	1887-1889	7	2,325,000 00	2,936,000 00	Decrease.....	\$651,000 00	Granted lands.
Sinking-fund mortgage, coupon.....	20	1893	8	12,528,000 00	12,694,000 00	Decrease.....	166,000 00	{ Road and franchise, Omaha to Ogden, third mortgage; granted lands, second mortgage.
Sinking-fund mortgage, registered.....	20	1893	8	1,955,000 00	1,927,000 00	Increase.....	28,000 00	
Collateral trust, "6 per cent."	29	1908	6	4,482,000 00	4,601,000 00	Decrease.....	119,000 00	{ Bonds of branch lines held by trustees. Omaha bridge, first mortgage.
Omaha Bridge	25	1896	8	1,519,000 00	1,621,000 00	Decrease.....	102,000 00	
Kansas Pacific Railway Company.								
Eastern Division, first mortgage (lien prior to United States).	30	1895	6	2,240,000 00	2,240,000 00	.....	.....	Road and income, Kansas City to a point 140 miles west.
Middle Division, first mortgage (lien prior to United States).	30	1895	6	4,063,000 00	4,063,000 00	.....	.....	Road and income, 140th mile-post to 394th mile-post.
United States subsidy, second mortgage.	30	1895-1898	6	6,303,000 00	6,303,000 00	.....	.....	Road and franchise, Kansas City to 394th mile-post.
Denver Extension, first mortgage	30	1899	6	6,254,000 00	6,266,000 00	Decrease.....	12,000 00	Road and lands, 394th mile-post to Denver.
Leavenworth Branch, first mortgage ...	30	1896	7	18,000 00	31,000 00	Decrease.....	13,000 00	Leavenworth Branch.
Consolidated mortgage	40	1919	6	14,855,000 00	15,244,005 00	Decrease.....	389,005 00	Blanket mortgage, 779 miles of road, and land grant 394 miles.
Income	40	1916	7	45,950 00	48,350 00	Decrease.....	2,400 00	Income.
Income (subordinated).....	40	1916	7	63,250 00	260,060 00	Decrease.....	196,810 00	Do.
Kansas Pacific Railway Company, called coupon certificate.	.....	.....	.....	4,477 50	5,880 00	Decrease.....	1,402 50	Do.
Denver Pacific Railway and Telegraph Company.								
First mortgage and land grant.....	30	1899	7	8,000 00	8,000 00	.....	.....	Cheyenne Division, road and lands.
Union Pacific Railway Company.								
Trust 5 per cent., coupon.	24	1907	5	3,673,000 00	3,673,000 00	.....	.....	{ Bonds of branch lines held by trustees. Omaha bridge, second mortgage.
Trust 5 per cent., registered	24	1907	5	15,000 00	15,000 00	.....	.....
Omaha Bridge renewal, second mortgage.	30	1906	5	230,000 00	.....	New debt.....	230,000 00	
Total funded debt afloat .....	.....	.....	.....	115,048,189 50	116,441,797 00	Net decrease..	1,393,807 50	

*Coupon bonds cancelled and changed for registered bonds.

The balance to the credit of the income account December 31, as shown by the following statement of revenue and expenditures the books of the company, was \$3,121,932.05, or \$3,344,281.27 after including expenditures for new construction and new equipment, which are shown in detail on page 8. This balance is reduced \$70,435.00 on reason of the difference in the amount of the United States required as stated by the company and found by this office, the company's statement being \$1,184,053.05, while that of this office is \$1,254,489.03.

Revenue and expenditures for the year ending December 31, 1885.

REVENUE.

Earnings	\$17,455,031 51	
Profit on stocks of other companies	456 00	
Profit on bonds of other companies	11,580 48	
Dividends on stocks of other companies.....	331,942 00	
Interest on bonds of other companies	1,797,673 16	
Profits on miscellaneous investments.....	47,861 38	
Interest on miscellaneous investments	10,800 00	
Profit on commercial coal sales	91,292 71	
Income from miscellaneous investments (Pullman cars)	115,958 25	
Income from miscellaneous land sales.....	10,335 90	
Interest repaid on Kansas Pacific consols.....	207,110 00	
Receipts of land department.....	4,986,795 28	
		<hr/>
Total		\$25,066,8

EXPENDITURES.

Operating expenses	\$9,050,355 20	
Interest on first-mortgage bonds.....	2,538,445 78	
Interest on other funded debt	2,797,821 27	
Discount and interest (floating debt).....	356,138 27	
Losses on bonds of other companies.....	35,615 65	
Losses on miscellaneous investments	91,330 35	
Company's sinking fund requirements.....	593,605 00	
New construction	46,385 96	
New equipment.....	175,963 26	
Expenses of land department paid from general income	30,920 13	
Expenses of land department paid from land department income.....	496,694 46	
Land receipts, paid to trustees of land mortgage.....	4,432,912 14	
Premium on land-grant bonds redeemed 1884-1885, land-department expense.....	57,188 68	
Premium on other bonds redeemed	26,897 55	
Loss in operating Leavenworth, Topeka and Southwestern Railroad, 1883-1884.....	21,578 02	
Due United States, company's statement	1,184,053 05	
		<hr/>
Total.....		21,944,9
		<hr/>
Surplus.....		3,121,9
		<hr/>
Surplus, excluding expenditures for new construction and equipment.		3,344,9

	Union Pacific Railway Com- pany.		Auxiliary lines.		Union Pacific system.	
	1885.	1884.	1885.	1884.	1885.	1884.
Gross earnings	\$17,455,031 51	\$17,837,000 88	\$8,470,140 10	\$7,820,229 53	\$25,925,171 61	\$25,657,290 41
Operating expenses	8,560,621 24	8,424,925 23	6,090,358 29	5,589,535 17	15,250,979 53	14,014,460 40
Taxes	8,894,410 27	9,412,135 65	1,779,781 81	2,230,694 36	10,674,192 03	11,642,830 01
	489,733 96	470,226 24	417,007 43	383,428 56	906,741 39	853,654 80
Net earnings	8,404,676 31	8,941,909 41	1,362,774 88	1,847,265 80	9,767,450 69	10,789,175 21
Expense ratio per cent. (excluding taxes)	49.04	47.23	78.99	71.48	58.83	54.63
Expense ratio per cent. (including taxes)	51.85	49.57	83.91	76.38	62.32	57.95
Average miles of road under operation	1,832.45	1,831.90	2,669.80	2,588.40	4,501.75	44,420.90
Gross earnings per mile of road	\$9,525 52	\$9,736 92	\$3,173 17	\$3,021 26	\$5,758 91	5,804 43
Operating expenses per mile of road	4,671 68	4,599 01	2,506 41	2,159 46	3,387 79	3,170 48
Taxes per mile of road	4,853 84	5,137 91	666 76	861 80	2,371 12	2,633 94
	267 26	256 09	156 22	148 13	201 42	193 12
Net earnings per mile of road	4,586 58	4,881 23	510 54	713 67	2,169 70	2,440 83

Comparative statement of earnings and expenses of the Union Pacific System for the years 1885 and 1884.

	1885.	1884.	Increase.	Decrease.
EARNINGS.*				
Passenger, cash.....	\$5,701,186 81	\$5,948,789 28	.....	\$247,602 92
Passenger, Government.....	107,832 06	127,117 72	.....	19,285 66
Freight, cash.....	17,138,835 92	16,868,518 53	\$269,817 39	.....
Freight, Government.....	173,089 18	261,571 42	.....	88,482 24
Freight, company.....	881,830 44	462,887 44	418,903 00	.....
Mail.....	814,889 64	852,270 80	.....	37,381 16
Express.....	664,228 87	823,693 46	.....	159,464 59
Car service.....	79,601 82	87,933 74	41,727 58	.....
Rent of buildings.....	36,838 58	55,019 73	.....	18,181 15
Miscellaneous.....	827,279 29	724,538 34	.....	897,259 05
Total.....	25,925,171 61	25,657,290 41	267,881 20	.....
EXPENSES.†				
Conducting transportation.....	4,537,456 13	4,156,168 85	381,287 28	.....
Motive power.....	5,459,098 16	5,009,270 83	449,827 33	.....
Maintenance of cars.....	1,211,481 84	1,181,285 97	80,145 87	.....
Maintenance of way.....	3,231,501 41	3,069,508 58	161,992 83	.....
Renewal of rails.....	329,563 01	248,722 79	80,840 22	.....
General expenses.....	481,933 98	399,503 38	82,430 60	.....
Taxes†.....	906,741 89	853,654 80	53,086 59	.....
Total.....	16,157,720 92	14,868,115 20	1,289,605 72	.....
Net earnings.....	9,767,450 69	10,789,175 21	.....	1,021,724 52
Expense ratio per cent.....	62.32	57.95	4.37	.....
Miles operated (average).....	4,501.75	4,420.30	81.45	.....

Earnings and expenses for the years 1885, 1884, 1883, 1882, 1881, and 1880.

Year.	Average miles operated.	Gross earnings.*	Expenses, including taxes.†	Net earnings.	Expense ratio.
1880.....	2,766.80	\$25,066,898 77	\$12,121,939 66	\$12,944,954 11	48.36
1881.....	3,125.45	28,971,250 27	15,840,080 01	13,131,170 26	54.67
1882.....	3,632.69	29,430,318 70	15,241,961 38	14,188,357 32	51.79
1883.....	4,120.65	28,629,222 80	16,144,339 81	12,484,882 99	56.39
1884.....	4,420.30	25,657,290 41	14,868,115 20	10,789,175 21	57.95
1885.....	4,501.75	25,925,171 61	16,157,720 92	9,767,450 69	62.32

* The mail earnings for 1884 and previous years have been revised by deducting the amount disallowed by the United States Government, in accordance with the decision of the Court of Claims.
† The taxes for 1884 and 1883 have been revised by transferring to the taxes of 1883 \$244,938.02 properly belonging to the taxes of that year, but paid in 1884.

Comparative statement of earnings and expenses of the Union Pacific Railway Company for the years 1885 and 1884.

	1885.	1884.	Increase.	Decrease.
EARNINGS.				
Passenger, cash.....	\$3,884,049 41	\$4,110,839 96	.....	\$226,290 55
Passenger, Government	95,850 39	102,257 16	.....	6,406 77
Freight, cash	11,816,424 85	11,075,840 68	\$240,584 17	.....
Freight, Government	168,724 36	236,867 43	.....	68,143 07
Freight, company	585,599 94	847,602 52	287,997 42	.....
Mail ¹	584,718 69	603,178 60	.....	18,459 91
Express	514,089 89	655,113 46	.....	141,023 57
Car service	21,672 65	7,792 38	13,880 27	.....
Rent of buildings.....	25,340 77	41,076 17	.....	15,735 40
Miscellaneous	258,560 56	656,992 52	.....	398,431 96
Total	17,455,031 51	17,887,060 88	.....	332,029 87
EXPENSES.				
Conducting transportation.....	2,791,857 68	2,772,468 26	19,389 42	.....
Motive power.....	2,804,846 42	2,868,119 66	.....	63,273 24
Maintenance of cars.....	799,454 42	738,474 35	60,980 07	.....
Maintenance of way.....	1,557,022 65	1,498,771 83	58,250 82	.....
Renewal of rails.....	212,004 85	196,275 46	15,729 39	.....
General expenses	395,985 22	350,815 67	45,119 55	.....
Total.....	8,560,621 24	8,424,925 23	135,696 01	.....
Taxes†.....	489,733 96	470,226 24	19,507 72	.....
Surplus earnings.....	8,404,676 31	8,941,909 41	.....	537,233 10
Miles operated (average).....	1,832.45	1,831.90	0.55	.....
Expense ratio, including taxes.....	51.85	49.87	2.02	.....
Expense ratio, excluding taxes.....	49.04	47.23	1.81	.....

Earnings and expenses for the years 1885, 1884, 1883, 1882, 1881, and 1880.

Year.	Average miles operated.	Gross earnings.*	Expenses including taxes.†	Net earnings.	Expense ratio.
1880	1,820.9	\$22,275,655 40	\$10,545,119 52	\$11,730,535 88	47.84
1881	1,820.9	24,105,880 41	12,480,342 71	11,625,537 70	51.77
1882	1,820.9	22,710,827 75	10,727,049 28	11,983,778 47	47.23
1883	1,820.9	20,915,624 11	10,558,658 86	10,356,965 25	50.48
1884	1,831.9	17,837,060 88	8,895,151 47	8,941,909 41	49.87
1885	1,832.4	17,455,031 51	9,050,355 20	8,404,676 31	51.85

* The mail earnings for the years 1880 to 1884, inclusive, have been revised by deducting the amount disallowed by the United States Government for mail service during that period, in accordance with the decision of the Court of Claims.

† The taxes for 1884 and 1883 have been revised by transferring to taxes of 1883 \$204,934.21 belonging to the taxes of that year, but paid in 1884, and included in expenses of that year as previously published.

Earnings and expenses of divisions for the year 1885.

	Gross earnings.	Operating expenses.	Taxes.	Net earnings.
Union Division	\$12,079,028 28	\$5,655,515 91	\$334,878 50	\$6,088,633 87
Kansas Division.....	4,562,862 50	2,369,395 06	132,874 41	2,060,593 03
Leavenworth Branch.....	106,043 48	77,090 19	9,540 58	19,412 71
Cheyenne Division	707,097 25	458,620 08	12,440 47	236,036 70
Union Pacific Railway Company.	17,455,031 51	8,560,621 24	489,733 96	8,404,676 31

The particulars of new construction during the year ending December 31, 1885, are given on page 8. On the Union Division, aided road, the total expenditure was \$31,322.55, but the account receives credit for \$15,266, the value of property sold, leaving the amount to be charged against earnings \$16,056.55. On the aided portion of the Kansas Division \$6,404.59 were expended and charged against earnings. The Saint James street viaduct is built diagonally across the State line of Missouri and Kansas, three-fourths of the structure being in Kansas City, Kans., or on the aided road, and one-fourth in Kansas City, Mo., or on the unaided road. The cost of construction has been apportioned accordingly. The expenditures on the unaided road were as follows: Union Division, \$12,510; Kansas Division, \$4,587.74; Cheyenne Branch, \$3,096.52; Leavenworth Branch, \$3,730.56; or a total expenditure on the lines of the Union Pacific proper (less credits) of \$46,385.96.

A statement of the expenditures for new equipment during the year ending December 31, 1885, given below, shows the amount expended for the system to have been \$252,542.05, of which \$175,963.26 was expended on account of the road owned by the Union Pacific Railway Company. As the company does not keep separate records of its equipment for each division, it was impracticable to determine the exact proportion of the expenditures each division should be charged with. But as the equipment is used in common by all divisions, the charge has been apportioned to each upon the basis of train mileage, as shown on page 9.

Amounts debited to new construction and new equipment accounts of the following companies of the Union Pacific System during the year 1885.

Division or road.	New construction.	New equipment.
Omaha Bridge	\$53, 531 86	.....
Union Division.....	28, 566 55	} \$175, 963 26
Kansas Division.....	10, 992 33	
Leavenworth Branch.....	3, 730 56	
Cheyenne Division	3, 096 52	
Total Union Pacific	99, 917 82	175, 963 26
Omaha and Republican Valley	975 84	2, 057 71
Omaha, Niobrara and Black Hills.....	.....	323 98
Colorado Central, narrow gauge .....	.....	*2, 808 94
Colorado Central, broad gauge	11, 426 89	9, 309 60
Marysville and Blue Valley .....	.....	185 94
Denver, South Park and Pacific.....	16, 285 36	*356 82
Echo and Park City	250 39	.....
Utah and Northern.....	3, 422 36	49, 062 50
Oregon Short Line.....	0, 563 44	19, 174 61
Salt Lake and Western.....	355 27	162 20
Lawrence and Emporia.....	3, 900 50	.....
Denver and Boulder Valley.....	390 00	.....
Kansas Central.....	*169 83	*557 00
Total Union Pacific system.....	143, 818 04	252, 542 05

*Credit. Represents value of equipment destroyed or broken up and charged in operating expenses

Renewals of track during 1885.

Division.	Steel rails.				Iron rails.				Cross-ties.			
	Tons.	Pounds.	Miles.	Feet.	Tons.	Pounds.	Miles.	Feet.	Oak.	Cedar.	Pine.	Total.
Union Division	1,298	342	13	4,111	665	853	7	2,975	69,674	73,441	253,785	394,900
Kansas Division	7,700	1,903	51	2,508	613	728	6	5,169	109,825	13,929	.....	123,454
Leavenworth Branch .....	.....	.....	.....	.....	109	1,726	1	1,260	1,200	8,339	.....	9,539
Cheyenne Division	1,594	1,119	16	4,812	154	1,847	1	4,022	.....	.....	63,925	63,925
Total Union Pacific	10,594	1,184	112	1,931	1,543	773	17	2,806	180,399	94,709	310,810	591,918
Omaha and Republican Valley	1,205	463	12	4,182	59	247	.....	3,487	17,086	30,708	.....	47,794
Omaha, Niobrara and Black Hills .....	.....	.....	.....	.....	6	.....	.....	300	126	10,330	4,036	14,492
Zabo and Park City	68	1,776	.....	3,853	16	449	.....	972	.....	.....	9,513	9,513
Colorado Central	863	1,730	3	2,828	170	1,161	1	4,946	.....	1,810	98,284	99,804
Salt Lake and Western .....	.....	.....	.....	.....	6	1,288	.....	395	.....	.....	1,217	1,217
Denver, South Park and Pacific	93	967	1	754	126	1,624	1	2,309	.....	.....	70,362	70,863
Utah and Northern	1,880	1,065	23	71	510	1,643	6	2,611	.....	.....	16,252	15,253
Oregon Short Line .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,506	4,506
Greeley, Salt Lake and Pacific .....	.....	.....	.....	.....	9	1,037	.....	587	.....	2,458	.....	6,984
Lawrence and Emporia .....	.....	.....	.....	.....	205	2,183	2	2,038	.....	.....	.....	2,459
Laramie, North Park and Pacific .....	.....	.....	.....	.....	5	1,800	.....	343	.....	.....	.....	561
Junction City and Fort Kearney	14	1,920	.....	831	406	299	4	636	1,393	21,861	.....	23,253
Solomon .....	.....	.....	.....	.....	82	825	.....	4,929	104	11,164	.....	11,268
Salina and Southwestern .....	.....	.....	.....	.....	83	820	.....	5,055	.....	1,362	.....	1,363
Denver and Boulder Valley .....	.....	.....	.....	.....	14	1,400	.....	877	.....	.....	10,148	10,148
Golden, Boulder and Carlton .....	.....	.....	.....	.....	1	392	.....	71	.....	.....	1,592	1,593
Georgetown, Breckenridge and Leadville .....	.....	.....	.....	.....	8	1,807	.....	847	.....	.....	831	831
Kansas Central .....	.....	.....	.....	.....	1,677	1,960	30	2,676	8,003	55,424	.....	59,427
Montana .....	.....	.....	.....	.....	20	1,541	.....	2,850	.....	.....	1,200	1,200
Denver and Middle Park .....	.....	.....	.....	.....	15	876	.....	909	.....	.....	633	633
Grand total, entire system	14,220	54	159	2,834	4,978	2,904	68	2,716	266,110	227,626	541,638	974,826

Auxiliary roads.—The company operates twenty-one branch lines, in nineteen of which it has a controlling interest, although each has an independent organization. The total mileage of these branch lines December 31, 1885, was 2,687.08. The bonds outstanding amounted to \$40,352,000, of which the Union Pacific owned \$24,080,000, which cost the company \$20,485,253.70. The total capital stock outstanding (par value) was \$42,257,750, of which the Union Pacific owned \$34,216,800, which cost it \$11,562,334.15. The average debt per mile of these auxiliary companies in stocks and bonds was \$30,743.31. The securities held by the Union Pacific represent \$21,695.22 per mile.

The Union Pacific Railway Company had also, on December 31, 1885, outstanding certain "advances" to these auxiliary companies, amounting to \$1,267,787.20. These "advances" were made to aid in construction, and are payable in the stocks and bonds of the companies to which the loans are made. The following statement shows these investments in detail:

Statement showing the investments in securities of auxiliary roads as of December 31, 1885.

Name of company.	Date of incorporation.	Capital stock.			Bonds.			Total investment of Union Pacific Company.		
		Issued.	Owned by Union Pacific Company.	Cost Union Pacific Company.	Issued.	Owned by Union Pacific Company.	Cost Union Pacific Company.	Stocks and bonds.	Advances payable in stocks and bonds.	Total.
Colorado Central of Colorado	Feb. 2, 1885	\$4,280,000 00	\$6,220,000 00	\$3,680,100 17	\$4,768,000 00	\$4,719,000 00	\$3,911,678 78	\$37,807,800 778 93	—	\$7,800,778 93
Colorado Central of Wyoming	Aug. 1, 1877	120,000 00	120,000 00	75,465 53	—	—	—	75,465 53	—	75,465 53
Denver and Boulder Valley	Oct. 1, 1870	700,000 00	17,000 00	4,250 00	550,000 00	548,000 00	548,000 00	552,250 00	—	552,250 00
Denver and Middle Park	Apr. 17, 1883	—	—	—	—	—	—	—	\$32,983 20	\$32,983 20
Denver, South Park and Pacific	June 14, 1873	6,235,400 00	6,135,100 00	4,864,713 49	4,738,000 00	2,797,000 00	2,704,000 00	7,048,713 49	178,094 51	7,249,407 00
Dodge and Park City	Jan. 17, 1881	480,000 00	480,000 00	85,556 96	480,000 00	480,000 00	482,000 00	517,556 96	—	517,556 96
Fort Collins, Breckenridge and Leadville	Feb. 23, 1881	127,700 00	127,700 00	137,700 00	127,000 00	127,000 00	137,000 00	254,700 00	177,504 80	432,204 80
Garden, Boulder and Carbon	Oct. 23, 1877	60,000 00	60,000 00	5,000 00	60,000 00	60,000 00	60,000 00	65,000 00	—	65,000 00
Greeley, Salt Lake and Pacific	Jan. 17, 1871	808,500 00	808,500 00	308,500 00	808,000 00	808,000 00	632,274 12	1,437,774 12	—	1,437,774 12
Granger City and Fort Kearney	June 20, 1871	997,100 00	720,000 00	7,200 00	970,000 00	970,000 00	970,000 00	977,200 00	210,530 91	1,187,730 91
Kansas Central	Apr. 14, 1879	1,848,000 00	1,818,400 00	473,703 15	1,848,000 00	1,162,000 00	1,073,400 00	1,546,103 15	—	1,546,103 15
Kansas, North Park and Pacific	May 24, 1880	64,400 00	64,400 00	64,400 00	—	—	—	64,400 00	2,073 43	66,473 43
Lawrence and Emporia	July 19, 1881	465,000 00	465,000 00	31,161 97	465,000 00	465,000 00	465,000 00	496,161 97	—	496,161 97
Montana Railway	Dec. 17, 1881	420,000 00	420,000 00	420,000 00	—	—	—	420,000 00	87,170 86	497,170 86
North Platte and Elgin Valley	July 2, 1879	64,000 00	60,000 00	10,074 96	128,000 00	128,000 00	115,200 00	125,074 96	—	125,074 96
Omaha and Republican Valley	Aug. 17, 1878	1,076,500 00	1,076,500 00	482,623 23	2,257,000 00	2,258,000 00	2,087,200 00	2,499,923 23	247,769 21	2,747,692 44
Omaha, Niobrara and Black Hills	Apr. 24, 1879	977,000 00	977,000 00	90,021 98	977,000 00	977,000 00	781,800 00	872,221 98	325,470 97	1,197,701 95
Oregon Short Line	Apr. 11, 1881	14,073,500 00	8,015,000 00	9,042 91	14,831,000 00	1,421,000 00	1,821,070 83	1,331,013 74	23,862 41	1,354,876 15
Palma and Southwestern	Dec. 16, 1878	288,400 00	231,760 00	84,072 16	540,000 00	540,000 00	540,000 00	578,072 16	—	578,072 16
Salt Lake and Western (Utah)	May 30, 1881	1,080,000 00	1,040,000 00	117,200 00	1,040,000 00	1,040,000 00	864,000 00	981,200 00	63,922 00	1,045,122 00
Siemon Railroad	Aug. 18, 1877	1,108,850 00	1,040,000 00	5,000 00	576,000 00	576,000 00	575,000 00	580,000 00	—	580,000 00
Utah and Northern	Aug. 30, 1876	5,543,000 00	4,816,400 00	674,390 45	5,543,000 00	4,968,000 00	2,330,730 00	4,008,120 45	94,635 09	4,099,755 54
Total		48,267,760 00	24,316,800 00	11,562,334 15	42,852,000 00	34,090,000 00	20,300,000 00	47,881,887 80	1,257,737 80	49,139,625 60

a Credit.

Statement of income and charges of auxiliary lines operated by the Union Pacific Railway Company for the year ending December 31, 1893.

Name of road.	Average number of miles operated.	Gross earnings.	Expenses.		Net earnings.		Other charges against income.		Balance of income.	
			Operating.	Taxes.	Surplus.	Deficit.	Interest on bonds.	Dividends on stock.	Surplus.	Deficit.
Colorado Central	227.17	\$1,320,765 69	\$600,324 64	\$60,487 82	\$209,443 53	.....	\$308,980 00	.....	.....	\$36,598 43
Denver and Boulder Valley	27.00	92,713 20	68,917 53	4,464 51	19,331 36	.....	38,500 00	.....	.....	19,108 64
Denver and Middle Park	3.52	2,651 40	5,975 56	.....	.....	.....	.....	.....	.....	3,324 16
Denver, South Park and Pacific	222.25	1,145,494 40	1,102,242 82	59,281 09	13,590 97	.....	264,740 00	.....	.....	320,808 52
Idaho and Park City	31.78	81,590 66	65,922 82	2,068 07	.....	.....	26,800 00	.....	.....	15,700 08
Georgetown, Breckenridge and Leadville	8.47	7,353 57	16,724 80	1,481 15	.....	.....	8,800 00	.....	.....	19,741 97
Goldsen, Boulder and Carbon	5.09	34,739 54	18,916 36	1,127 69	16,706 49	.....	4,800 00	.....	.....	2,083 51
Greeley, Salt Lake and Pacific	63.89	63,311 24	78,165 82	11,254 81	.....	.....	54,500 00	.....	.....	82,069 89
Junction City and Fort Kearney	87.60	232,224 23	158,587 60	26,401 83	53,235 20	.....	67,800 00	.....	.....	14,884 77
Kansas Central	163.14	268,059 43	260,287 70	34,806 90	.....	.....	80,800 00	.....	.....	127,455 17
Laramie, North Park and Pacific	12.51	958 53	2,625 78	7,739 50	.....	.....	.....	.....	.....	2,403 75
Lawrence and Emporia	31.00	34,806 76	40,134 65	7,061 64	.....	.....	27,000 00	.....	.....	50,100 58
Montana Railway	9.80	122,312 71	168,758 22	544 78	18,016 61	.....	.....	.....	.....	23,885 39
Marysville and Blue Valley	258.42	671,886 96	560,311 74	45,817 75	18,080 09	.....	8,300 00	.....	.....	117,375 83
Omaha and Republican Valley	114.97	170,748 89	131,109 78	21,783 30	40,614 17	.....	157,800 00	.....	.....	54,504 84
Omaha, Nebraska and Black Hills	610.62	1,823,190 47	1,182,872 97	92,357 06	567,959 84	.....	694,000 00	.....	.....	228,100 18
Oregon Short Line	35.43	64,922 13	30,738 09	6,082 91	19,131 12	.....	32,400 00	.....	.....	13,288 87
Salina and Southwestern	57.60	71,179 85	45,140 16	2,210 43	23,829 26	.....	64,800 00	.....	.....	46,979 74
Salt Lake and Western	57.04	144,208 57	91,088 01	13,545 51	39,734 25	.....	34,800 00	.....	.....	.....
Salmon Railroad	408.18	2,114,262 86	1,701,023 19	42,011 81	371,228 85	.....	388,010 00	.....	.....	18,449 12
Utah and Northern .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	2,687.08	8,470,140 10	6,660,368 26	417,007 43	1,366,401 08	127,306 29	2,664,110 00	51,000 00	4,234 26	1,268,618 89

* The road is 12.8 miles in length, and is leased to the Omaha and Republican Valley Railroad Company.

† Rental.

‡ Dividends were paid partly from accumulated surplus of former years.

§ Dividends paid from surplus of 1894 and 1895.

|| Deduct amount of deficit.

} Deduct amount of surplus.

The net earnings of the auxiliary lines operated by the Union Pacific Railway Company for the year ending December 31, 1885, amounted to \$1,366,491.08. The annual interest on bonds was \$2,604,110. On two roads dividends amounting to \$51,000 were paid on stock, all of which, however, was owned by the Union Pacific Railway Company, making a total for the year of \$2,655,110, or a deficit from the business of the year of \$1,288,618.92. That portion of the deficit, however, which represents unpaid interest upon bonds owned by the Union Pacific Company, is a mere book account or a charge against the several auxiliary roads, payable from their future earnings, and not money actually paid out by the Union Pacific Railway Company.

It appears from the report of the Government directors in 1882 that the auxiliary roads of the Union Pacific system are allowed constructive mileage, and as such allowances, without the consent of the Government, seem to me illegal, and I can find no evidence that such consent has been given, Messrs. Walker and Warner were instructed to endeavor to ascertain, while examining the accounts of the Union Pacific Railway Company, how much of such allowances was taken from the net earnings of the "aided" roads of the Union Pacific system. But the great number of the accounts and the short time available made it impracticable to prepare a statement of this business even for one month, but they brought to this office the means of showing hereafter the value of the investigation.

The magnitude of these allowances is indicated by the following statement:

Union Pacific Railway system.—Constructive mileage allowances.

	Passenger.	Freight.
<i>Union Pacific Railway.</i>		
Union Division:		
Bridge	50 cents per passenger..	8 cents per 100 pounds; \$4 per car.
East of Cheyenne, for each mile carried	1 mile is allowed	1 mile is allowed.
West of Cheyenne, for each mile carried.....	1½ miles are allowed	1½ miles are allowed.
Kansas Division, for each mile carried.....	1 mile is allowed.....	1 mile is allowed.
Leavenworth Branch, for each mile carried.....	.....do	Do.
Denver Pacific, for each mile carried	1½ miles are allowed	1½ miles are allowed.
<i>Auxiliary lines.</i>		
Colorado Central:		
Julesburg Branch, for each mile carried	Local rates	1½ miles are allowed.
Broad gauge, for each mile carried.....	1½ miles are allowed	Do.
Narrow gauge, for each mile carried.....	Local rates	Local rates.
Denver and Boulder Valley, for each mile carried ..	1½ miles are allowed	1½ miles are allowed.
Denver and Middle Park, for each mile carried.....	Local rates	Local rates.
Denver, South Park and Pacific:		
East-bound, for each mile carried .....	.....do	Do.
West-bound, for each mile carried	2 miles are allowed	Do.
Echo and Park City, for each mile carried .....	.....do	2 miles are allowed.
Georgetown, Breckenridge and Leadville, for each mile carried.	Local rates	Local rates.
Golden, Boulder and Caribou, for each mile carried ..	.....do	Do.
Greeley, Salt Lake and Pacific, for each mile carried.	1½ miles are allowed	Broad gauge, 2 miles; narrow gauge, local rates.
Junction City and Fort Kearney, for each mile carried.	1½ miles are allowed	1½ miles are allowed.
Kansas Central, for each mile carried	Local rates	3 miles are allowed.
Laramie, North Park and Pacific, for each mile carried.	.....do	1½ miles.
Lawrence and Emporia, for each mile carried.....	1½ miles are allowed	1½ miles are allowed.
Montana Railway, for each mile carried.....	1½ miles are allowed	1½ miles are allowed.
Marysville and Blue Valley, for each mile carried..	Local rates are allowed.	Local rates are allowed.
Omaha, Niobrara and Black Hills, for each mile carried.	1½ miles are allowed	1½ miles are allowed.
Oregon Short Line, for each mile carried.....	.....do	1½ miles are allowed.
Salina and Southwestern, for each mile carried.....	.....do	1½ miles are allowed.
Salt Lake and Western, for each mile carried.....	Local rates are allowed.	Local rates are allowed.
Solomon Railroad, for each mile carried	1½ miles are allowed	1½ miles are allowed.
Utah and Northern, for each mile carried.....	1½ miles are allowed	1½ miles are allowed.
Omaha and Republican Valley, for each mile carried.	1½ miles are allowed	1½ miles are allowed.

CENTRAL PACIFIC RAILROAD COMPANY.

The books and accounts of this company were examined in San Francisco by Mr. W. M. Thompson, and statements are herewith submitted showing its business and financial condition.

The various lines of the company have been operated since April 1, 1885, by the Southern Pacific Company of Kentucky, under the terms of a lease dated February 17, 1885. The gross earnings of the "Pacific system" for the year ending June 30, 1886, compared with those of the year ending June 30, 1885, show a decrease of \$449,299.32, yet the net earnings increased \$2,430,512.79, or 31.08 per cent. This increase was caused by a very great reduction in operating expenses (the item "general expenses and taxes," showing a decrease of \$1,982,728.10; "conducting transportation," \$255,777.66; "maintenance of way," \$481,305.55; "motive power," \$242,055.98, &c.).

The property of the company was also examined by him, and the track, road-bed, bridges, trestles, station buildings, &c., found to be in excellent condition. The principal improvements made during the year on the main line and the Oregon and Visalia Divisions, consist of new side tracks at Atwater, Athlone, Durham, Morano, Penryn, and Verdi; new freight platform at Bovine; new bunk and cook house at Corinne; new passenger depot and eating-house at Lathrop, to replace buildings destroyed by fire; new combination depot at Madera; new combination depot at Redding, to replace building destroyed by fire; new bunk and cook house at Tehama; and new fuel-house at Wadsworth. At Oakland considerable additions to side track in connection with new coal-yard have been made. On the Visalia Division thirteen new culverts were built and several open culverts extended. At Berenda a new combination depot, turn-table, coal-bin, and additional side tracks to improve the connection with the San Joaquin and Yosemite Valley Railroad have been made. At Marysville a new passenger depot has been constructed. The bridges at Truckee and Prosser Creek and the wood-work on the drawbridge over the San Joaquin River have been renewed. The snow-sheds for a distance of 1,500 feet east of Blue Cañon and 2,500 feet east and 2,500 feet west of the Butte Cañon bridge have been repaired.

Five and a quarter miles of track have been renewed with steel rails, and about 170,000 cross-ties provided for current renewals.

As the report of the company is incomplete, the amounts expended during the fiscal year ending June 30, 1886, for additions and betterments to the railway cannot be stated.

The rolling stock owned by the company consists of 234 locomotives, 232 of which are equipped with Westinghouse brakes; 325 passenger and 4,463 freight cars, all of which are equipped with Westinghouse brakes.

The company had acquired by United States patent 2,324,955 acres of land up to June 30, 1886, and had sold 1,891,571 acres for \$7,117,886.02. The principal outstanding on account of time sales amounted to \$1,108,187.04, and the interest to \$6,419.

Work on the Oregon Division of this road has been prosecuted vigorously during the past year, the present terminus being near Soda Springs, 25 miles north of Delta and 215 miles from the junction with the main line.

*Financial condition of the Central Pacific Railroad Company June 30, 1895.***LIABILITIES.**

Funded debt (see statement following)	\$58,264,000 00
Interest on funded debt, accrued but not due	1,462,930 00
United States subsidy bonds	27,855,680 00
Interest on United States bonds, accrued but not due	30,134,826 00
Trustees' land-grant mortgage, to redeem land bonds.	1,281,978 25
Sinking funds uninvested	767 00
Bills and loans payable	102,500 00
Accounts payable	3,019,279 47
Dividends unpaid	11,542 00
Coupon interest unpaid	15,015 00
Total debt	122,148,538 72
Capital stock	59,275,500 00
Total stock and debt	181,424,038 72

ASSETS.

Cost of road (including Oregon extension)	\$142,986,527 15
Cost of equipment	8,572,323 04
Real estate, shops, &c.	2,760,173 30
Miscellaneous investments	1,815,657 00
United States transportation and sinking-fund accounts	9,886,941 35
Stocks and bonds owned	1,074,442 47
Cash	31,661 91
Sinking funds of the company	8,276,076 17
Trustees of land mortgage for redemption of bonds	1,281,978 25
Land contracts, deferred payments on time sales	1,108,187 04
Bills and accounts receivable	316,209 71
Interest accrued but not due, payable by Southern Pacific Company	1,462,930 00
Water front in San Francisco, Oakland, and Sacramento	7,750,000 00
Total assets	187,433,178 61
Surplus	6,009,140 00

The company also claims that it owns lands estimated at \$23,750,000, but on account of conflicting and overlapping grants, adverse claims, desert lands, &c., their value as an asset is merely conjectural, being derived from an estimate of the number of acres to which the company would be entitled under the several acts of Congress and the price per acre fixed by the Government on adjoining lands.

Name.	Class of bonds.	Location of lien.	Bonds authorized.	Bonds outstanding.	Term in years.	Date of maturity.	Rate of interest (per cent.).	Interest payable.	
Central Pacific R. R.	First mortgage, series A.	Sacramento to State line.	\$3,000,000	\$2,995,000	30	July 1, 1895	6	Jan. and July	Sinking fund \$100,000 yearly, commencing 1870.
Do.	First mortgage, series B.	do	1,000,000	1,000,000	30	July 1, 1896	6	Jan. and July	
Do.	First mortgage, series C.	do	1,000,000	1,000,000	30	July 1, 1896	6	Jan. and July	
Do.	First mortgage, series D.	do	1,200,000	1,363,000	30	July 1, 1896	6	Jan. and July	
Do.	First mortgage, series E.	California State line to 5 miles west of Ogden.	4,000,000	3,987,000	30	Jan. 1, 1897	6	Jan. and July	
Do.	First mortgage, series F.	do	4,000,000	3,999,000	30	Jan. 1, 1898	6	Jan. and July	111 series A bonds held to exchange for these. Sinking fund, series A and B, \$25,000 yearly, commencing 1876.
Do.	First mortgage, series G.	do	4,000,000	3,999,000	30	Jan. 1, 1898	6	Jan. and July	
Do.	First mortgage, series H.	do	4,000,000	3,999,000	30	Jan. 1, 1898	6	Jan. and July	
Do.	First mortgage, series I.	do	2,525,000	3,511,000	30	Jan. 1, 1898	6	Jan. and July	
Western Pacific R. R.	Old issue.	(Lien prior to subsidy bonds.)	25,833,000					Sinking fund \$100,000 yearly, commencing 1870.
Do.	First mortgage, series A.	Sacramento to San José.	1,970,000	111,000	30	Dec. 1, 1895	6	June and Dec.	
Do.		do		1,859,000	30	July 1, 1899	6	Jan. and July	Sinking fund \$100,000 yearly, commencing 1870.
Do.		(Lien prior to subsidy bonds.)	.....	1,970,000				
Central Pacific R. R.	First mortgage, series B.	Niles to San José.	765,000	765,000	30				Sinking fund \$100,000 yearly, commencing 1870.
Do.	California State Aid.	Sacramento to State line.	1,500,000	284,000	20	July 1, 1884	7	Jan. and July	
Central Pacific (California and Oregon Division).	First mortgage, series B.	Roseville Junction to Oregon State line.	7,200,000	3,630,000	20	Jan. 1, 1892	6	Jan. and July	Sinking fund \$100,000 yearly, commencing 1876.
California and Oregon R. R.	First mortgage, series A.	do	6,000,000	6,000,000	20	Jan. 1, 1888	6	Jan. and July.	
San Francisco, Oakland, and Alameda.	First mortgage.	1,500,000	687,000	20	July 1, 1890	8	Jan. and July.	Sinking fund, \$100,000 yearly, commencing 1880.

Statement of funded debt in detail, June 30, 1886—Continued.

Name.	Class of bonds.	Location of lien.	Bonds authorized.	Bonds outstanding.	Term in years.	Date of maturity.	Rate of interest (per cent.).	Interest payable.	
San Joaquin Valley R. R.	First mortgage	Lathrop to Goshen	\$3,080,000	\$3,080,000	30	Oct. 1, 1900	6	April and Oct.	Sinking fund \$50,000 yearly, commencing 1880.
Central Pacific R. R.	Income	No lien	6,000,000	3,285,000	10	May 1, 1888	8	May and Nov.	Sinking fund 10 per cent. yearly, commencing 1879.
Land-grant bonds.	First mortgage on Central Pacific and California and Oregon lands.	.....	10,000,000	4,630,000	20	Oct. 1, 1890	6	April and Oct.	\$5,370,000 have been re-deemed. All land sales pledged to redeem these bonds.
Do.	Second mortgage on Central Pacific and California and Oregon lands.	.....	10,000,000	5,000,000	30	Oct. 1, 1915	6	April and Oct.	
Central Pacific R. R.	United States subdly	Sacramento to 5 miles west of Ogden.	76,930,000	53,264,000	30	.....	6	Jan. and July.	Sinking fund requirement under act of May 7, 1878.
Western Pacific R. R.	.....do	Brighton to San Jose	1,970,560	27,855,680					
Total .....	.....	.....	104,785,680	86,119,680					

Comparative statement of the earnings and expenses of the Central Pacific Railroad Company.

[Aided road, 800.66 miles.]

	Year ending December 31, 1885.	Year ending December 31, 1884.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
United States:				
Passenger	\$12,990 37	\$98,604 84	Decrease ...	\$85,614 47
Freight.....	31,068 93	75,334 49	Decrease ...	44,265 56
Mail.....	298,882 09	304,285 87	Decrease ...	5,403 78
Commercial:				
Passenger.....	1,729,290 67	2,161,746 88	Decrease ...	432,456 21
Freight	3,550,142 86	3,971,703 66	Decrease ...	421,560 80
Express	106,404 18	105,361 68	Increase	1,042 50
Miscellaneous	220,435 63	583,743 25	Decrease ...	363,307 62
Gross earnings	5,949,214 73	7,300,780 67	Decrease ...	1,351,565 94
EXPENSES.				
Conducting transportation	528,049 41	688,732 16	Decrease ...	160,682 75
Maintenance of way	407,626 65	956,015 47	Decrease ...	548,388 82
Motive power.....	1,067,422 78	1,326,735 09	Decrease ...	259,312 31
Maintenance of cars	208,074 51	263,495 98	Decrease ...	55,421 47
General expenses and taxes	955,908 41	1,181,645 52	Decrease ...	225,737 11
Total operating expenses and taxes ...	3,167,081 76	4,410,624 22	Decrease ...	1,249,542 46
Interest on first-mortgage bonds	1,671,180 00	1,671,630 00	Decrease ...	450 00
New construction	35,563 25	321,013 85	Decrease ...	285,450 60
New equipment	211,840 75	30,357 95	Increase	181,482 80
Total expenses under act of May 7, 1878.	5,085,665 76	6,430,626 02	Decrease ...	1,353,960 26
Net earnings	863,548 97	861,154 65	Increase	2,394 32

Statement of amounts due on account of interest and the sinking fund under the act of May 7, 1878, for the year ending December 31, 1885, from the Central Pacific Railroad Company.

EARNINGS.

United States:		
Passenger	\$12,990 37	
Freight	31,068 93	
Mail	298,882 09	
		\$342,941 39
Commercial:		
Passenger	1,729,290 67	
Freight	3,550,142 86	
Express	106,404 18	
Miscellaneous	220,435 63	
		5,606,273 34
Gross earnings		\$5,949,214 73

EXPENSES.

Conducting transportation	\$528,049 41	
Maintenance of way	407,626 65	
Motive power	1,067,422 78	
Maintenance of cars	208,074 51	
General expenses and taxes	955,908 41	
Total operating expenses and taxes		\$3,167,081 76
Interest paid on first-mortgage bonds hav- ing priority of lien over those of the United States	1,671,180 00	
New construction	35,563 25	
New equipment	211,840 75	
		1,918,584 00
Total expenses under act of May 7, 1878		5,085,665 76
Net earnings so ascertained (25 per cent. is \$215,887 24)		863,548 97

One-half transportation services on aided line	\$171,470 00	
Cash payment, 5 per cent. of net earnings	43,177 44	
Total to credit of interest account		\$214,648 13
One-half transportation services on aided line	171,470 70	
Total to credit of sinking-fund account		171,470 70
Total for the year		\$386,118 83

The following is a statement of the company's bills against the Government for transportation services rendered during year ending December 31, 1885:

For services on aided road	\$342,941 39	
For services on non-aided road	514,242 16	
Total		\$857,183 55
Amount settled by the accounting officers of the Treasury Department for services on the aided road and credited to—		
Interest account	151,991 19	
Sinking-fund account	151,991 16	
		303,982 35
Amount remaining unsettled		553,201 20

Accounts for services over the non-aided portions of the road, amounting to \$85,560.62, were certified by the accounting officers to the Secretary of the Treasury under his letter of instructions dated January 12, 1884, which leaves the sum of \$467,640.58 upon which no action has been taken.

The Supreme Court decided, in "The United States v. Central Pacific Railroad Company," No. 1291, October term, 1885, that compensation for transportation services over non-aided lines cannot be retained by the Treasury Department.

The following tables show the traffic of the road from January 1, 1870, to December 31, 1885, and the average rate per mile:

Years.	Number of miles.	Passengers.			Average per passenger per mile.
		Number.	Carried one mile.	Gross receipts.	
					Cents.
1870	992.07			\$3,381,506 18	
1871	1,054.84			3,486,239 29	
1872	1,176.41		166,120,000	4,065,210 00	1.85
1873	1,254.49		120,858,000	4,418,417 42	1.69
1874	1,265.97		134,318,000	4,729,806 04	1.52
1875	1,349.28		168,348,000	5,509,309 32	1.37
1876	1,423.94	5,772,650	172,649,000	5,589,404 43	1.34
1877	1,605.95	6,276,979	181,715,000	5,481,704 35	1.42
1878	2,118.74	6,977,188	178,753,325	5,264,913 07	2.34
1879	2,325.25	6,803,479	180,779,711	4,919,254 63	2.73
1880	2,492.26	6,707,945	191,415,400	5,819,794 23	2.04
1881	2,707.00	7,032,368	218,117,760	6,692,828 17	1.67
1882	3,111.81	7,688,514	255,824,263	7,474,210 18	2.01
1883	2,900.83	8,642,583	281,109,508	7,045,826 07	2.73
1884	2,796.83	8,773,853	275,034,110	7,226,570 94	2.66
1885	2,802.45	8,795,141	260,140,788	6,444,494 09	2.48

Years.	Freight.			Average per ton per mile.
	Gross tons.	Carried one mile.	Gross receipts.	
				Cents.
1870.....	443,800		\$8,282,479 28	
1871.....			4,653,811 75	
1872.....	948,114	180,510,000	6,987,444 58	3.05
1873.....	941,000	248,793,000	7,462,604 03	3.00
1874.....	1,029,000	280,305,000	7,980,894 92	2.85
1875.....	1,096,000	316,503,000	9,938,08 88	3.14
1876.....	1,284,000	368,460,000	10,773,618 34	2.96
1877.....	1,415,000	363,542,000	10,095,349 67	2.78
1878.....	1,787,768	392,281,710	10,402,276 40	2.75
1879.....	1,864,335	392,950,000	10,934,579 39	2.78
1880.....	2,140,879	505,063,768	13,245,857 79	2.84
1881.....	2,757,103	733,245,889	15,842,139 01	2.14
1882.....	3,109,697	902,981,309	16,301,882 72	1.81
1883.....	3,883,941	775,976,492	14,932,909 94	1.92
1884.....	3,808,410	664,507,819	13,043,084 27	1.89
1885.....	2,745,787	654,200,152	12,404,064 90	1.68

Comparative statement of the earnings and expenses of the Central Pacific Railroad Company.

[Southern Pacific Company—Pacific system.]

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$4,444,464 00	\$4,808,798 74	Decrease..	\$400,334 05	8.97
Freight.....	12,494,064 99	12,618,807 58	Decrease..	124,742 54	0.99
Mail.....	547,226 09	548,899 18	Decrease..	1,673 07	0.31
Express.....	307,537 86	308,074 10	Decrease..	536 24	0.17
Miscellaneous.....	796,979 13	710,885 54	Increase..	88,093 58	12.09
Total.....	30,590,165 75	21,030,465 07	Decrease..	448,299 82	2.13
EXPENSES.					
Conducting transportation.....	2,884,982 47	2,820,760 18	Decrease..	\$64,222 06	2.79
Maintenance of way.....	1,863,485 06	1,844,790 61	Decrease..	18,694 45	28.09
Motive power.....	3,442,408 63	3,634,464 61	Decrease..	192,055 98	5.57
Maintenance of cars.....	712,928 38	681,878 20	Increase..	31,050 18	12.93
General expenses and taxes.....	2,454,477 01	4,437,205 11	Decrease..	1,982,728 10	11.11
Total.....	10,339,291 55	18,219,093 66	Decrease..	2,879,812 11	21.78
Net earnings.....	10,250,884 20	7,820,871 41	Increase..	2,430,012 79	31.08
Average miles operated.....	2,806.54	2,856.07	Decrease..	49.53	1.78
Earnings per mile.....	\$7,336 49	\$7,309 57	Decrease..	\$26 08	0.41
Expenses per mile.....	2,883 99	4,828 42	Decrease..	944 43	20.46
Net earnings per mile.....	2,652 50	2,736 15	Increase..	914 35	33.39
Percentage of expenses to earnings..	50.21	111.11	Decrease..	12.62	20.00

SIOUX CITY AND PACIFIC RAILROAD COMPANY.

The main line of this company from Sioux City to Fremont is 101.58 miles in length, and the company also owns a branch from California Junction to Missouri Valley of 5.84 miles. Forty-eight miles are laid with steel rails.

The workshops and offices of the company are at Missouri Valley Junction. The shops are equipped and manned to do the work of this road and that of the Fremont, Elkhorn and Missouri Valley Railroad. The property of this company, shops and road, were inspected by me on the

11th day of August. The manager, Mr. W. F. Fitch, kindly accompanied me. The road-bed is well raised and the ditches sufficiently capacious, the ties firm, and rails fairly well laid. It has no good ballast, however, which the character of the soil makes more than usually necessary. The rolling stock consists of 12 locomotives, of which 5 are fitted with Westinghouse brakes; 13 passenger cars, all of which have Westinghouse brakes and Miller platforms and couplers; 167 freight cars, and 6 road and miscellaneous cars.

This company received from the United States a subsidy in bonds of \$1,628,320. Its indebtedness on June 30, 1886, is as follows:

Principal	\$1,628,320 00
Accrued interest	1,757,395 00
Total	3,385,715 00

CREDIT.

Transportation performed and applied to interest account.....	201,550 11
Balance in favor of the United States, but not due until maturity of principal, 1895-'99	3,184,164 88

The company also received from the Government a grant of 41,398.23 acres of land, which was sold in bulk to the Missouri Valley Land Company, April 15, 1875, for \$200,000.

Statement of 5 per cent. of the net earnings, as ascertained under the acts of 1862 and 1864, for the year ending December 31, 1885.

EARNINGS.

United States:		
Passenger	\$528 17	
Freight.....	94 97	
Mail.....	13,390 20	
		\$14,013 34
Commercial:		
Passenger.....	187,328 46	
Freight.....	264,504 88	
Express	11,512 37	
Car-service	689 11	
Rent of buildings and grounds	1,180 75	
Miscellaneous	23,098 79	
		488,314 36
Gross earnings.....		\$502,327 70

EXPENSES.

Conducting transportation	\$59,889 00	
Maintenance of way	29,200 47	
Motive power.....	70,552 89	
Maintenance of cars.....	20,785 58	
General expenses and taxes	47,442 90	
Total operating expenses and taxes.....		227,870 84
Surplus.....		274,456 86
Subsidy proportion, being 94.74 per cent....	260,020 43	
Less new construction.....	2,800 68	
Net earnings so ascertained.....		257,219 75
Five per cent. of which is.....		12,860 99
The Government is also entitled to one-half the transportation rendered it on the aided portion of the road, being 94.74 per cent. of \$14,013.34.....	13,276 24	
One-half of which is.....		6,638 12
Total amount due the United States for the year		19,499 11

Financial condition of the Sioux City and Pacific Railroad Company, June 30, 1886.

LIABILITIES.	
First-mortgage bonds.....	\$1,628,000 00
Interest on same.....	241,980 00
United States subsidy bonds	1,628,320 00
Interest on same	1,757,395 09
Dividends unpaid.....	2,957 51
Bills payable.....	45,000 00
Pay-rolls and vouchers.....	58,956 78
Due other companies on account of traffic	16,835 42
Total debt.....	5,379,444 80
Capital stock	2,068,400 00
Total stock and debt.....	7,447,844 80

ASSETS.	
Road, fixtures, and equipment	\$5,524,889 07
Fuel, material, and stores on hand	58,732 54
Cash	46,146 76
Accounts receivable.....	108,798 98
Half Government transportation on aided road applied to bond and interest account	51,881 29
Due from United States; unsettled accounts	162,696 98
Total assets.....	5,953,145 62
Deficit.....	1,494,699 18

Comparative statement of the earnings and expenses of the Sioux City and Pacific Railroad Company.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.)
EARNINGS.					
Passenger	\$202,424 68	\$189,786 48	Increase ..	\$12,638 20	6.69
Freight	264,486 29	280,890 88	Decrease .	15,904 09	5.67
Mail	13,994 05	13,858 10	Increase ..	640 95	4.80
Express	11,829 38	11,628 88	Increase ..	200 50	1.72
Miscellaneous	22,637 46	22,910 93	Decrease .	273 47	1.19
Total.....	515,371 81	518,019 72	Decrease .	2,647 91	0.51
EXPENSES.					
Conducting transportation	68,347 84	113,458 78	Decrease .	45,111 89	89.76
Maintenance of way	26,527 17	72,291 24	Decrease .	45,764 07	68.31
Motive power	74,378 16	80,911 19	Decrease .	6,533 03	8.07
Maintenance of cars	23,219 95	15,575 48	Increase ..	7,644 47	49.08
General expenses and taxes	40,056 57	57,820 87	Decrease .	17,764 30	30.72
Total.....	232,529 19	340,057 51	Decrease .	107,528 32	31.62
Net earnings	282,842 62	177,962 21	Increase ..	104,880 41	58.98
Average miles operated.....	107.42	107.42	.....	.....	.....
Earnings per mile.....	4,797 72	4,822 37	Decrease .	24 65	0.51
Expenses per mile	2,164 67	3,165 68	Decrease .	1,001 01	31.62
Net earnings per mile.....	2,633 05	1,656 69	Increase ..	976 36	58.98
Percentage of expenses to earnings.	45.11	65.64	Decrease .	20.53	31.27

CENTRAL BRANCH UNION PACIFIC RAILROAD COMPANY.

The road of this company is leased to and operated by the Missouri Pacific Railway Company. The length of the subsidized portion, from Atchison to Waterville, is 100 miles. At the latter place it connects with the Atchison, Colorado and Pacific Railroad, the western terminus of which is Lenora.

The surface of the road is very good, except where the Atchison, Topeka and Santa Fé Road encroaches for a few miles; there the leveling of the ties and laying of the rails are not perfect. Nevertheless, the road is competent to its business. The work of a crushing machine, which is in operation, will no doubt produce improvement by furnishing proper ballast.

The company owns 35 locomotives, 9 of which have Westinghouse brakes; 22 passenger cars, all of which are fitted with Westinghouse brakes and Miller couplers and platform; 558 freight-cars and 9 miscellaneous.

The company received from the United States 245,000 acres of land. During the year ending June 30, 1886, it received from the sale of land \$66,142.56, and the sum of \$92,286.73 is outstanding on account of time sales.

Statement of 5 per cent. of net earnings, as ascertained under the acts of 1862 and 1864, for the year ending December 31, 1885.

EARNINGS.	
Passenger	\$113,683 08
Freight	728,248 83
Mail	13,734 72
Express	9,949 26
Miscellaneous	12,431 90
Gross earnings.....	\$878,047 79
EXPENSES.	
Conducting transportation	\$135,947 62
Maintenance of way	250,539 32
Motive power.....	169,415 15
Maintenance of cars.....	40,101 65
General expenses and taxes	35,007 35
Total operating expenses and taxes.....	631,011 09
Net earnings so ascertained	247,036 70
Five per cent. of which is	\$12,351 83
The Government is also authorized to retain one-half the transportation performed for it, which was:	
Mail.....	\$13,734 72
Passenger and freight.....	148 58
Total Government transportation.....	13,883 30
One half of which is.....	6,941 65
Whole amount due United States for the year.....	19,293 48
Financial condition of the Central Branch Union Pacific Railroad Company, June 30, 1886.	
LIABILITIES.	
First-mortgage bonds	\$2,230,000 00
Interest on same	1,735 00
United States subsidy bonds	1,600,000 00
Interest on same.....	1,837,818 26
Accounts payable.....	112,618 40
Total debt.....	5,782,161 66
Capital stock	1,000,000 00
Total stock and debt.....	6,782,161 66

ASSETS.

Road and fixtures	\$4,000,061 41
Land contracts, land cash, &c	92,303 34
Company's stocks and bonds owned by company	15,400 00
Other stocks and bonds	108,337 76
Accounts receivable	305,043 79
Government transportation withheld	256,785 25
Cash payment by company to bond and interest account	6,926 91
Total assets	4,784,858 46
Deficit	1,997,303 20

Comparative statement of the earnings and expenses of the Central Branch Union Pacific Railroad Company.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$118,783 28	\$105,549 82	Increase ..	\$8,233 46	7.79
Freight	653,156 74	737,478 06	Decrease..	84,316 82	11.43
Mail	13,784 72	13,784 72	.....	.....	.....
Express.....	10,442 23	9,195 89	Increase ..	1,246 34	13.55
Miscellaneous.....	9,153 86	12,122 16	Decrease..	2,968 80	24.49
Total.....	800,270 83	878,075 65	Decrease..	77,805 82	8.86
EXPENSES.					
Conducting transportation.....	182,863 72	122,455 42	Increase ..	10,408 80	8.49
Maintenance of way	193,266 43	255,589 11	Decrease..	62,272 68	24.87
Motive power	185,825 65	161,859 88	Decrease..	25,538 73	15.82
Maintenance of cars	26,681 81	85,894 83	Decrease..	8,712 52	24.61
General expenses and taxes.....	15,808 61	11,672 92	Increase ..	4,135 69	35.43
Total.....	504,446 22	586,421 16	Decrease..	81,974 94	13.96
Net earnings'	295,824 11	291,654 49	Increase ..	4,169 62	1.43
Average miles operated	100.00	100.00	.....	.....	.....
Earnings per mile.....	\$8,002 70	\$8,780 75	Decrease..	\$778 05	8.86
Expenses per mile.....	5,044 46	5,864 21	Decrease..	819 75	13.98
Net earnings per mile	2,958 24	2,916 54	Increase ..	41 70	1.43
Percentage of expenses to earnings.	63.03	66.79	Decrease..	3.76	5.63

Indebtedness of the company to the United States, June 30, 1886 :

Principal	\$1,600 000 00
Accrued interest.....	1,837,803 26

Total **3,437,808 26**

Transportation performed and money paid into the Treasury :

Transportation applied to interest account.....	\$256,785 25
Cash payment applied to interest account.....	6,926 91

Total..... **263,712 16**

Balance in favor of the United States, but not due until maturity of principal, 1895-'99.....

3,174,096 10

CONDITION OF SINKING FUNDS.

The sinking funds of the Union and Central Pacific Companies June 30, 1886, held by the Treasurer of the United States under the act of May 7, 1878, amounted to \$9,658,713.10, the Union Pacific having to its credit \$6,419,351.81 and the Central Pacific \$3,239,361.29.

Since the creation of these funds the Secretary of the Treasury has made the following investments:

Character of bonds.	Union Pa- cific.	Central Pa- cific.	Total.
Funded loan of 1881, 5 per cent., extended at 8 per cent.....	\$256,450 00	\$736,700 00	\$993,150 00
Funded loan of July 12, 1882, 8 per cent.....	1,620,000 00	1,220,000 00	2,840,000 00
Funded loan of 1907, 4 per cent.....	4,218,650 00	199,100 00	4,417,750 00
Currency sixes (subsidy bonds)	861,000 00	444,000 00	865,000 00
Principal.....	6,456,100 00	2,599,800 00	9,055,900 00
Less 8 per cent. bonds redeemed.....	1,420,000 00	1,761,800 00	3,181,800 00
Present principal.....	5,036,100 00	838,000 00	5,874,100 00
Premium paid.....	1,119,620 06	218,963 73	1,338,583 79
Total cost	6,155,720 06	1,056,963 73	7,212,683 79

There remained in the United States Treasury *uninvested* on June 30, 1886, the following amounts:

Credit of the Union Pacific.....	\$263,631 75
Credit of the Central Pacific	2,182,397 56
Total	2,446,029 31

Since my previous report investments have been made as follows:

UNION PACIFIC.

Date.	Character of bonds.	Principal.	Premium paid.	Total.
August 14, 1885	Funded loan of 1907, 4 per cent.....	\$219,000 00	\$50,015 94	\$269,015 14
October 13, 1885....	.....do	161,000 00	37,095 93	198,095 93
December 15, 1885..	.....do	44,000 00	10,532 50	54,532 50
January 28, 1886 ...	.....do	184,000 00	43,585 00	227,585 00
April 21, 1886 .....	.....do	487,000 00	127,595 63	614,595 63
	Total	1,095,000 00	268,825 00	1,363,825 00

CENTRAL PACIFIC.

May 22, 1885	Funded loan of 1882, 8 per cent.....	\$900,000 00	\$27,000 00	\$927,000 00
December 17, 1885 .	.....do	820,000 00	12,400 00	332,400 00
	Total	1,220,000 00	39,400 00	1,259,400 00

The premium paid on bonds for the sinking fund of the Union Pacific to June 30, 1886, amounted to \$1,119,620.06, and the company had been credited with interest on said investments, amounting to \$448,500.02. For the Central Pacific the premium amounted to \$218,963.73 and the interest to \$280,821.81.

The following statements show the amounts produced under existing laws and the interest paid by the United States on account of the subsidy bonds since July 1,1878:

Union Pacific (including the Kansas Pacific).

Period.	Amounts produced under existing laws.			Interest paid by the United States.
	Interest account.	Sinking-fund account.	Total.	
Six months ending December 31, 1878	\$476, 651 97	\$461, 773 53	\$938, 425 50	\$1, 006, 185 36
Year ending December 31, 1879	861, 657 24	682, 876 40	1, 544, 533 64	2, 012, 370 72
Year ending December 31, 1880	973, 567 58	789, 424 01	1, 762, 991 59	2, 012, 370 72
Year ending December 31, 1881	943, 497 67	672, 914 23	1, 616, 411 90	2, 012, 370 72
Year ending December 31, 1882	972, 179 84	1, 082, 915 38	2, 055, 095 22	2, 012, 370 72
Year ending December 31, 1883	921, 212 19	926, 705 55	1, 847, 917 74	2, 012, 370 72
Year ending December 31, 1884	717, 775 77	525, 396 81	1, 243, 172 08	2, 012, 370 72
Year ending December 31, 1885	700, 062 19	553, 035 28	1, 253, 987 47	2, 012, 370 72
Total	6, 507, 494 45	5, 695, 040 69	12, 262, 535 14	15, 092, 780 40

*Central Pacific (including the Western Pacific).**

Six months ending December 31, 1878.....	\$224, 192 90	\$277, 511 48	\$501, 704 38	\$835, 670 40
Year ending December 31, 1879	399, 123 51	464, 602 25	863, 725 76	1, 671, 340 80
Year ending December 31, 1880	417, 927 81	566, 993 27	984, 921 11	1, 671, 340 80
Year ending December 31, 1881	416, 578 45	584, 642 72	1, 001, 221 17	1, 671, 340 80
Year ending December 31, 1882	346, 802 95	377, 826 16	724, 629 11	1, 671, 340 80
Year ending December 31, 1883	318, 956 96	267, 724 69	586, 681 65	1, 671, 340 80
Year ending December 31, 1884	282, 170 83	239, 112 60	521, 282 93	1, 671, 340 80
Year ending December 31, 1885	214, 648 13	171, 470 70	386, 118 83	1, 671, 340 80
Total	2, 620, 401 07	2, 949, 883 87	5, 570, 284 94	12, 535, 056 00

* The accounts of the Central Pacific Company, under the act of May 7, 1878, have been restated and expenditures made during the above period for new construction and new equipment deducted to ascertain the net earnings.

Central Branch Union Pacific.

Year ending June 30, 1879	\$5, 644 38	.....	\$5, 644 38	\$96, 000 00
Year ending June 30, 1880 *.....	6, 926 91	.....	6, 926 91	96, 000 00
Year ending June 30, 1881	45, 893 69	.....	45, 893 69	96, 000 00
Year ending June 30, 1882	81, 124 47	.....	81, 124 47	96, 000 00
Year ending June 30, 1883	27, 517 25	.....	27, 517 25	96, 000 00
Year ending June 30, 1884	10, 244 17	.....	10, 244 17	96, 000 00
Year ending June 30, 1885	57, 345 21	.....	57, 345 21	96, 000 00
Year ending June 30, 1886	37, 038 77	.....	37, 038 77	96, 000 00
	221, 734 85	.....	221, 734 85	768, 000 00
Less*	25, 521 04	.....	25, 521 04	.....
Total	196, 213 81	.....	196, 213 81	768, 000 00

*The company having obtained judgment in the Court of Claims for \$25,521.04, for "one-half transportation," the sum of \$6,926.91 was deducted therefrom on account of 5 per cent. of net earnings, and the balance, \$18,594.13, paid the company in cash, March, 1880.

Sioux City and Pacific.

Period.	Amounts produced under existing laws.			Interest paid by the United States.
	Interest account.	Sinking-fund account.	Total.	
Year ending June 30, 1879	\$16, 229 40	.....	\$16, 229 40	\$97, 699 20
Year ending June 30, 1880	14, 285 18	.....	14, 285 18	97, 699 20
Year ending June 30, 1881	18, 946 57	.....	18, 946 57	97, 699 20
Year ending June 30, 1882	16, 251 94	.....	16, 251 94	97, 699 20
Year ending June 30, 1883	26, 076 82	.....	26, 076 82	97, 699 20
Year ending June 30, 1884	9, 782 93	.....	9, 782 93	97, 699 20
Year ending June 30, 1885	47, 521 36	.....	47, 521 36	97, 699 20
Year ending June 30, 1886	22, 890 43	.....	22, 890 43	97, 699 20
	171, 984 63	.....	171, 984 63	781, 593 60
Less judgment of Court of Claims for "one-half transportation," paid in cash, January, 1882..	45, 967 42	.....	45, 967 42	.....
Total	125, 997 21	.....	125, 997 21	781, 593 60

In my previous report it is remarked that the condition of the sinking fund shows that the law of 1878 is inadequate to the object for which it was enacted, that of producing a sum sufficient to pay the debts that will be due to the United States from the "aided" railroad companies. The following statement proves conclusively that all existing laws for that object are utterly insufficient, and that additional and judicious legislation will be necessary to enable those companies to discharge their debts to the Government.

The total amount of interest paid by the United States	
on account of the subsidy bonds up to June 30, 1886,	
was.....	\$70, 854, 325 62
There had been retained by the Treasury Department for	
transportation services and credited to—	
Interest account	\$21, 091, 383 32
Sinking-fund account.....	9, 658, 713 10
<hr/>	
Total	30, 750, 096 42
<hr/>	
Excess of interest paid	40, 104, 229 20
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NORTHERN PACIFIC RAILROAD COMPANY.

This road was inspected by the engineer of this office in September. The mileage on June 30 of the present year was 2,800.60, viz:

	Miles
Main line, Ashland, Wis., to Wallula, Wash.....	1, 739.10
Cascade Division, Pasco to Ellenburg, Wash.....	127.10
Cascade Division, Portland, Oreg., to Eagle Gorge, Wash.....	191.70
Branch lines (including Saint Paul to Brainerd, 137.90 miles, and Northern Pacific Junction to Duluth, 232 miles).....	742.70

The construction of the remaining 75 miles of the Cascade Division is so well advanced that it is probable there will not be more than 5 miles unfinished at the end of this year. Work upon the Stampede tunnel is now well under way at each end, and is being driven night and day. The switch-back line over the Pass will be about 7 miles in length, and may be completed before the first of January next. The elevation to be overcome by this track is about 1,100 feet, using gradients of 296 feet per mile upon tangents, making liberal compensation upon the curves. It is intended to use upon these steep grades locomotives built especially for that purpose, having cylinders 22 by 26 inches, 10 drivers of 45 inches diameter, and one pair of leading wheels 30 inches diameter, the weight on each driver being about 14,000 pounds; the weight of tender, with fuel and water, will be about 37.5 tons, making the total weight of engine and tender when in use about 115.5 tons. Should the coming winter prove favorable for working, the line will probably be in operation before June 1, 1887.

The rolling stock throughout is of excellent quality and is kept in good condition. There are now upon the road 386 locomotives, 209 of which have the Westinghouse train-brakes; 274 cars for passenger service, all equipped with Miller coupler and platform and Westinghouse brakes; 9,492 freight cars, a large part having train-brakes, and 1,042 cars used in special and road repair service. The dining cars are large and the service excellent. Nearly 80 per cent. of the track is laid with steel rails, weighing 56 pounds per yard. The track and buildings are kept in good condition.

The total number of acres of land received by the company from the United States, by patent and certification, June 30, 1886, was 11,459,836.75, of which 5,830,871.26 have been sold. From these sales

the company has received \$20,836,000.02, and there are outstanding on time sales \$3,676,204.

Financial condition of the Northern Pacific Railroad Company, June 30, 1886.

LIABILITIES.

First-mortgage bonds	\$44,028,000 00
Other funded debt, including dividend certificates	28,849,321 20
Interest on funded debt	1,882,301 79
Bills and accounts payable	2,466,010 60
Pay-rolls and vouchers	1,020,879 79
Net land sales under general first mortgage	1,256,976 18
Earnings invested in equipment	2,205,239 29
Accumulated sinking funds	618,194 40

Total debt	82,326,923 25
Capital stock	87,058,310 99

Total stock and debt	169,385,234 24
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ASSETS.

Road, fixtures, and real estate	\$144,980,072 08
Equipment	11,620,301 11
Deferred payments on account of land contracts and land cash	3,676,204 00
Fuel, material, and stores on hand	1,171,278 92
Cash	2,230,246 51
Company's stocks and bonds owned by company	125,780 65
Other stocks and bonds owned by company	1,929,918 61
Cash in hand of trustee applicable to retirement of bonds	73,154 38
Sinking-fund in hand of trustees	581,694 40
Bills and accounts receivable	2,534,879 51
Due from other companies on account of traffic	206,840 98
Due from United States	183,510 89
Suspense accounts	274,511 81

Total assets	169,588,393 85
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Surplus	203,159 61
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Comparative statement of the earnings and expenses of the Northern Pacific Railroad Company.

	Year ending June 30, 1885.	Year ending June 30, 1886.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$2,897,218 11	\$3,006,171 87	Decrease ..	\$168,953 76	5.51
Freight	8,189,614 62	7,424,049 01	Increase ..	765,565 61	10.81
Mail	347,967 11	411,149 05	Decrease ..	63,191 94	15.87
Express	241,769 02	240,305 72	Decrease ..	4,596 70	1.87
Miscellaneous	58,968 84	86,418 97	Decrease ..	82,445 63	37.54
Total.....	11,730,527 20	11,224,149 62	Increase ..	496,377 58	4.42
EXPENSES.					
Conducting transportation	1,682,107 67	1,592,937 76	Increase ..	89,169 91	5.60
Maintenance of way.....	1,241,495 88	1,363,195 97	Decrease..	21,700 59	1.80
Motive power	1,902,227 20	1,983,523 44	Decrease..	81,296 24	4.09
Maintenance of cars.....	605,956 47	573,682 28	Increase ..	32,324 19	5.64
General expenses and taxes	624,477 02	688,011 51	Decrease..	58,534 49	8.57
Total.....	6,156,263 74	6,196,300 96	Decrease..	40,037 22	0.64
Net earnings	5,574,263 46	5,037,848 66	Increase ..	536,414 80	10.64
Average miles operated	2,717.60	2,495.56	Increase ..	222.04	8.89
Earnings per mile	\$4,316 50	\$4,501 65	Decrease..	\$185 15	4.11
Expenses per mile.....	2,265 83	2,482 98	Decrease..	217 60	8.76
Net earnings per mile	2,051 17	2,018 72	Increase ..	32 45	1.61
Per centage of expenses to earnings.	52.48	55.15	Decrease..	2.67	4.84

OREGON AND CALIFORNIA RAILROAD COMPANY.

This company now operates 451 miles of road, including the branch, 11.50 miles, from Albany Junction to Lebanon.

The company has received by patent from the Government 323,068.68 acres of land, of which 237,773.78 acres have been sold. It has received from sales \$384,389.72, and there are outstanding on time sales \$385,647.67.

The company has 43 locomotives fitted with Westinghouse brakes, 40 passenger cars fitted with the same brakes and with Miller couplers and platforms, 592 freight and 225 road and miscellaneous cars.

Financial condition of the Oregon and California Railroad Company, June 30, 1896.

LIABILITIES.

First-mortgage bonds	\$9,020,000 00
Interest on same	1,085,072 81
Other funded debt	2,610,000 00
Dividends unpaid.....	23,908 10
Accounts payable.....	465,675 42
Pay-rolls and vouchers	134,949 71
Due other companies on account of traffic.....	2,823 76
Called bonds.....	37,039 57
Adjustment account with Oregon Transcontinental Company.....	2,425,129 07
Total debt	15,804,598 44
Capital stock.....	19,000,000 00
Total stock and debt	34,804,598 44

ASSETS.

Road and fixtures.....	\$21,658,606 40
Equipment	1,468,111 19
Real estate other than road.....	148,290 97
Granted lands not sold, estimated.....	382,890 88
Due on land-grant contracts.....	287,352 05
Fuel, material, and stores on hand.....	123,750 07
Cash	104,198 50
Company's stock and bonds owned by company	2,610,000 00
Bills and accounts receivable.....	106,171 69
Due from other companies on account of traffic.....	183 72
Sinking-fund account.....	433,648 30
Due from United States, unsettled accounts for mail service	17,426 85
Suspense accounts	65,030 76
Capitalized debt	6,785,235 31
Total assets.....	34,190,896 69
Deficit.....	613,701 75

Comparative statement of the earnings and expenses of the Oregon and California Railroad Company.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$355,985 18	\$385,515 47	Decrease..	\$29,530 29	7.66
Freight.....	499,151 87	496,157 86	Increase..	2,994 01	0.60
Mail.....	43,287 12	44,377 29	Decrease..	1,090 17	2.46
Express.....	25,165 10	81,000 60	Decrease..	5,835 50	18.82
Miscellaneous.....	9,602 80	18,861 09	Decrease..	9,258 29	49.09
Total.....	983,162 07	975,912 81	Decrease..	42,720 24	4.38
EXPENSES.					
Conducting transportation	172,796 76	174,163 73	Decrease..	1,366 97	0.78
Maintenance of way.....	801,066 97	811,355 61	Decrease..	10,288 64	8.30
Motive power	114,291 05	124,559 51	Decrease..	10,268 46	8.24
Maintenance of cars.....	42,397 57	46,153 26	Decrease..	3,755 09	8.14
General expenses and taxes	115,051 64	150,819 26	Decrease..	85,267 02	23.46
Total.....	745,603 99	806,551 87	Decrease..	60,947 88	7.55
Net earnings	187,588 08	169,360 94	Increase..	18,227 14	10.76
Average miles operated	448.48	448.48	.....	.....	.....
Earnings per mile	\$166 00	\$2,176 04	Decrease..	\$95 25	4.38
Expenses per mile.....	1,062 51	1,768 41	Decrease..	135 90	7.55
Net earnings per mile	418 28	877 63	Increase..	40 65	10.76
Percentage of expenses to earnings.	79.89	82.64	Decrease..	2.75	8.33

SAINT PAUL AND DULUTH RAILROAD COMPANY.

The road operated by this company is 225 miles in length, of which 178.50 is owned by the company, and 46.50 leased; 175.50 miles of the track is laid with steel rails.

The equipment consists of 43 locomotives, 13 of which have Westinghouse brakes; 36 passenger cars, all of which have Westinghouse brakes and Miller platforms and couplers; 1,441 freight and 117 miscellaneous cars.

The number of acres of land received from the United States is 1,466,009.46, of which 308,955.44 acres have been sold, and the company still owns 1,157,054.02 acres. The amount received from sales is \$1,718,108.90, and there are outstanding on time sales \$38,458.41.

Financial condition of the Saint Paul and Duluth Railroad Company, June 30, 1886.

LIABILITIES.	
First-mortgage bonds	\$1,000,000 00
Other funded debt	210,000 00
Pay-rolls and vouchers.....	187,014 59
Accounts payable	188,559 34
Due other companies on account of traffic.....	25,252 58
Due other companies on account of leases.....	1,791 66
Taxes	16,977 20
Deferred receipts from land sales, stumpage, &c	350,709 99
Undivided land income	84,790 49
Total debt.....	2,065,095 85
Capital stock	9,432,378 11
Total stock and debt	11,497,473 96

ASSETS.

Road and fixtures.....	\$9,409,998 38
Equipment	772,111 53
Land contracts, land cash, &c.....	32,458 41
Fuel, material, and stores on hand	71,217 95
Cash	236,413 95
Stocks and bonds of other companies	504,493 11
Miscellaneous investments	18,478 55
Sinking fund in hand of trustees	33,119 64
Bills and accounts receivable	399,058 05
Total assets.....	11,483,338 44
Deficit.....	14,135 52

Comparative statement of the earnings and expenses of the Saint Paul and Duluth Railroad Company.

	Year ending June 30, 1884.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$251,518 21	\$251,233 33	Increase ..	\$10,379 88	4.2
Freight	1,196,468 04	1,008,789 67	Increase ..	187,678 37	15.6
Mail	14,161 99	15,145 44	Decrease ..	983 45	6.9
Express	9,522 51	10,329 72	Decrease ..	807 21	7.2
Miscellaneous.....	6,142 57	8,013 09	Decrease ..	1,870 43	22.2
Total	1,457,908 32	1,298,511 16	Increase ..	159,397 16	15.6
EXPENSES.					
Conducting transportation.....	215,558 37	207,633 68	Increase ..	7,919 59	2.2
Maintenance of way.....	158,796 81	227,632 58	Decrease ..	68,835 77	34.2
Motive power	282,642 09	286,635 16	Decrease ..	3,993 07	1.3
Maintenance of cars.....	77,257 82	75,618 12	Increase ..	1,639 70	2.1
General expenses and taxes	123,508 71	182,950 04	Decrease ..	59,441 33	32.4
Total.....	857,758 70	980,469 58	Decrease ..	122,710 88	12.2
Net earnings	630,149 62	313,041 58	Increase ..	317,108 04	161.2
Average miles operated	225.00	225.00	.....	.....	.....
Earnings per mile	\$5,612 93	\$5,748 93	Increase ..	\$264 00	15.6
Expenses per mile.....	3,812 26	4,357 64	Decrease ..	545 38	12.2
Net earnings per mile	2,800.67	1,391.29	Increase ..	1,409.38	161.2
Percentage of expenses to earnings ..	57.66	75.79	Decrease ..	18.13	22.2

CHICAGO AND NORTHWESTERN RAILWAY COMPANY.

The length of the road owned by the company is 3,949.06 miles, and there are 822.63 miles of side tracks, making a total trackage of 4,771.69 miles, of which 3,202.06 miles are laid with steel rails.

The equipment consists of 681 locomotives with Westinghouse brakes, 477 cars in the passenger service, all of which are equipped with Westinghouse brakes and Miller coupler and platform; 20,966 freight cars, and 155 road and miscellaneous cars.

This company received a grant of land from the United States, as did also the Cedar Rapids and Missouri River Railroad Company, which it acquired by purchase July 2, 1884, and the Winona and Saint Peter Railroad, which it operates as a proprietary line.

The whole number of acres patented to it by the Government on December 31, 1885, was 2,956,176.69, of which it has sold and conveyed 1,266,128.74 acres, and yet retains the title to 1,690,048.22 acres. The total amount received from sales is \$4,209,473.82, and there are outstanding on time sales \$930,739.

Financial condition of the Chicago and Northwestern Railway Company, December 31, 1885.

LIABILITIES.	
First-mortgage bonds.....	\$63,369,500 00
Interest on same	394,700 99
Other funded debt	27,935,000 00
Interest on same	268,390 05
Dividends unpaid	59,206 75
Land notes.....	275,000 00
Pay-rolls and vouchers	820,378 28
Due other companies on account of traffic.....	81,554 56
Accounts payable	940,414 86
Total debt.....	94,144,145 49
Capital stock, including proprietary companies.....	74,920,320 53
Total stock and debt.....	169,064,466 02

ASSETS.	
Road and fixtures.....	\$140,018,151 26
Equipment	23,433,815 43
Real estate other than road.....	200,000 00
Land contracts, land cash, &c.....	1,241,000 00
Fuel, material, and stores on hand	1,749,257 21
Cash	8,158,261 90
Company's stock and bonds owned by company	284,425 40
Other stocks and bonds owned by company.....	12,505,642 14
Miscellaneous investments	2,000 00
Due from United States	137,506 78
Bills receivable	305,634 78
Accounts receivable.....	1,127,065 62
Total assets.....	184,162,760 52
Surplus.....	15,098,294 50

Statement of the earnings and expenses of the Chicago and Northwestern Railway Company, for the year ending December 31, 1886.

EARNINGS.	
Passenger	\$5,482,243 86
Freight.....	17,794,937 45
Mail.....	479,088 94
Express	389,108 74
Miscellaneous.....	155,679 67
Total.....	24,301,058 66

EXPENSES.	
Conducting transportation.....	\$3,974,825 74
Maintenance of way	2,952,336 23
Motive power.....	4,424,653 05
Maintenance of cars.....	1,306,635 61
General expenses and taxes.....	1,215,943 89
Total.....	13,934,394 52

Net earnings.....	\$10,366,664 14
Miles operated.....	3,049.06
Earnings per mile.....	\$6,153 63
Expenses per mile	\$3,528 53
Net earnings per mile.....	\$2,625 10
Percentage of expenses to earnings	57.34

CHICAGO, ROCK ISLAND AND PACIFIC RAILWAY COMPANY.

This company received from the Government a grant of 1,261,181 acres of land. The Land Commissioner reports that during the year ending March 31, 1886, the sales amounted to 2,469.99 acres, realizing the sum of

\$25,466.18, being an average of \$10.31 per acre, and that the company then owned 16,749.93 acres.

It owns 331 locomotives, 229 passenger cars, 7,865 freight cars, and 700 miscellaneous cars.

This company not having complied with all the requirements in relation to reports, I am able to give but little information in regard to it.

Financial condition of the Chicago, Rock Island and Pacific Railroad Company, April 1, 1886.

LIABILITIES.	
First-mortgage bonds.....	\$12,500,000 00
Other funded debt	8,960,000 00
Addition and improvement account.....	8,213,000 00
Accounts payable	506,751 16
Total debt.....	30,179,751 16
Capital stock	41,960,000 00
Total stock and debt	72,139,751 16
ASSETS.	
Road, fixtures, and equipment.....	\$60,366,236 54
Fuel, material, and stores on hand.....	356,280 40
Company's bonds owned by company.....	400,000 00
Other stocks and bonds owned by company.....	8,382,029 25
Miscellaneous investments.....	1,451,387 08
Accounts receivable.....	860,943 97
Cash	867,306 56
Total assets.....	72,684,273 80
Surplus	544,522 64

Comparative statement of the earnings and expenses of the Chicago, Rock Island and Pacific Railway Company.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$3, 124, 763 10	\$3, 037, 967 39	Increase ..	\$86, 795 71	2.85
Freight	7, 757, 652 03	8, 063, 147 00	Decrease ..	305, 494 97	3.95
Mail	192, 502 32	164, 746 32	Increase ..	27, 756 00	16.83
Express.....	149, 471 98	147, 423 00	Increase ..	2, 048 98	1.38
Miscellaneous.....	845, 405 74	723, 513 63	Increase ..	121, 892 11	16.65
Total.....	12, 069, 795 17	12, 136, 797 34	Decrease ..	67, 002 17	0.55
EXPENSES.					
Conducting transportation	8, 202, 460 49	8, 275, 817 28	Decrease ..	73, 356 79	0.89
Maintenance of way.....	1, 442, 120 24	1, 285, 169 92	Increase..	156, 950 32	12.19
Motive power	878, 165 14	802, 784 31	Increase..	75, 380 83	8.58
Maintenance of cars.....	855, 334 49	947, 419 68	Decrease ..	92, 085 19	10.73
General expenses and taxes	1, 246, 709 83	1, 171, 286 76	Increase..	75, 422 57	6.44
Total.....	7, 124, 789 69	7, 042, 477 95	Increase..	82, 311 74	1.16
Net earnings	4, 945, 005 48	5, 094, 319 39	Decrease ..	149, 313 91	2.93
Average miles operated, ..	1, 383.00	1, 383.66	Decrease ..	0.66	0.05
Earnings per mile.....	\$8, 727 25	\$8, 771 51	Decrease ..	\$44 26	0.50
Expenses per mile	5, 151 69	5, 089 74	Increase..	61 95	1.21
Net earnings per mile	3, 575 56	3, 681 77	Decrease ..	106 21	2.91
Percentage of expenses to earnings.	59.03	58.03	.....	1.01	1.73

CHICAGO, BURLINGTON AND QUINCY RAILROAD COMPANY.

This company has extended its branch roads into all territory in which it could hope to obtain remunerative business, although other roads may have been established therein. The length of the roads of the system is now 3,646 miles, and the branches now under construction will probably increase it to nearly or quite 4,000 miles before the end of the present year.

Inspection was made by the engineer of that portion of the road (originally a part of the Burlington and Missouri River Railroad in Nebraska) from Plattsmouth to Kearney Junction. The road-bed has been considerably improved since the date of his last report, and the track kept in very good condition. Stone ballast now extends 38.63 miles, gravel and cinders being used upon 62.23 miles. The worn iron rails are being replaced by steel, but during the last year only a small quantity has been found necessary. Over 25,000 new ties have been put in the track, and some work done in filling up trestles which were rendered useless by changes in the drainage system, 538 lineal feet having been filled. The wooden bridge (No. 164) near Crete, has been replaced by an iron truss of 150 feet span. Improvements and additions have been made at several stations. Ten stalls have been added to the Plattsmouth engine-house, five to that at Lincoln, and five at Hastings. At Ashland and at Fairmont good station-houses have been built of wood, 24 by 30 feet, and a new water station, with a good tank and windmill, has been erected at Fairmont.

All the lines of this company are kept in excellent condition, are furnished with good rolling stock, and prompt attention seems to be given to the requirements of the business of their territory.

The equipment of the company on the 31st of December last comprised 598 locomotives, 398 cars in the passenger service (including five dining cars), 22,291 freight cars and 1,909 cars for road and miscellaneous use, showing an increase for that year of 11 locomotives, 12 passenger cars, 1,814 freight cars, and 126 miscellaneous.

This company, together with the various companies with which it has consolidated, has received from the Government 2,781,714.77 acres of land, of which 2,673,345.98 acres have been sold, and the company still owns 108,368.79 acres. The total sum received from the sale of lands to December 31, 1885, was \$15,725,314.90, and the amount outstanding on account of time sales was \$3,670,104.83.

Financial condition of the Chicago, Burlington and Quincy Railroad Company, December 31, 1885.

LIABILITIES.

Funded debt.....	\$70,913,507 86
Pay-rolls, vouchers, and unpaid accounts.....	2,776,740 75
Sinking funds.....	10,538,991 64
Contingent liabilities for branch roads.....	6,011,000 00
Total debt.....	90,240,240 25
Capital stock	76,384,525 00
Total stock and debt.....	166,624,765 25

ASSETS.

Road, fixtures, and equipment.....	\$105,458,856 84
Cost of branch roads.....	41,291,733 98
Fuel, material, and stores on hand.....	1,858,025 18
Cash	3,063,529 08
Company's stocks and bonds owned by company	2,733,552 43
Other stocks and bonds owned by company.....	10,747,531 17
Sinking fund in hand of trustees	8,331,196 99
Bills and accounts receivable.....	3,373,348 55
Suspense accounts	184,564 98
Miscellaneous investments.....	610,126 98
Total assets.....	177,652,466 09
Surplus.....	11,027,700,94

Comparative statement of the earnings and expenses of the Chicago, Burlington and Quincy Railroad system.

	Year ending December 31, 1885.	Year ending December 31, 1884.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$5, 286, 407 70	\$5, 339, 806 15	Decrease ..	\$53, 458 45	1.00
Freight	19, 565, 853 41	18, 514, 431 00	Increase..	1, 051, 421 81	5.38
Mail					
Express.....					
Miscellaneous.....	1, 704, 164 05	1, 629, 814 68	Increase..	74, 849 87	4.51
Total.....	26, 556, 425 16	25, 483, 612 43	Increase..	1, 072, 812 73	4.21
Total expenses.....	14, 405, 767 61	14, 230, 350 61	Increase..	175, 417 00	1.23
Net earnings	12, 150, 657 55	11, 253, 261 82	Increase..	897, 395 73	7.97
Average miles operated.....	3, 646.05	3, 398.79	Increase..	247.26	7.27
Earnings per mile.....	\$7, 283 61	\$7, 497 84	Decrease ..	\$7, 214 23	2.85
Expenses per mile.....	3, 951 06	4, 186 88	Decrease ..	235 82	5.63
Net earnings per mile.....	3, 332 55	3, 310 96	Increase..	21 59	0.65
Percentage of expenses to earnings.	54.24	55.84	Decrease ..	1.60	2.86

DUBUQUE AND SIOUX CITY RAILROAD COMPANY.

This road, extending from Dubuque to Sioux City, is 142.89 miles in length, and has also 25.19 miles of sidings. Since October 1, 1867, it has been operated by the Illinois Central Railroad Company, under a lease running twenty years from that date.

The inspection of this road was not practicable.

During the year 1885 the sum of \$8,814.61 was expended in ballast and other improvements to the road-bed.

The company owns no equipment.

This company received from the United States a grant of six sections of land per mile, aggregating 548,697.60 acres, but the meager reports received at this office fail to show what disposition has been made of it.

Comparative statement of the earnings and expenses of the Dubuque and Sioux City Railroad Company.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$235, 824 95	\$237, 532 06	Decrease..	\$2, 197 11	0. 92
Freight	650, 538 84	634, 102 20	Increase ..	16, 436 64	2. 59
Mail.....	15, 997 60	16, 039 78	Decrease..	42 18	0. 27
Express	15, 655 01	14, 642 89	Increase ..	1, 012 12	6. 91
Miscellaneous.....	5, 881 91	5, 810 52	Increase ..	71 39	1. 22
Total.....	923, 898 81	908, 117 45	Increase ..	15, 280 86	1. 68
EXPENSES.					
Conducting transportation	208, 051 11	192, 795 26	Increase ..	15, 255 85	7. 91
Maintenance of way.....	94, 284 75	121, 837 07	Decrease..	27, 552 32	22. 61
Motive power					
Maintenance of cars.....	72, 799 73	74, 541 43	Decrease..	1, 741 70	2. 34
General expenses and taxes	395, 696 46	392, 503 49	Increase ..	3, 192 97	0. 82
Total.....	770, 832 05	781, 677 25	Decrease..	10, 845 20	1. 39
Net earnings	152, 566 26	126, 440 20	Increase ..	26, 126 06	20. 66
Average miles operated	142. 89	142. 89	.....	.....	.....
Earnings per mile.....	\$6, 462 81	\$6, 355 35	Increase ..	\$106 96	1. 68
Expenses per mile.....	5, 894 59	5, 470 48	Decrease..	75 89	1. 39
Net earnings per mile	1, 067 72	884 87	Increase ..	182 85	20. 66
Percentage of expenses to earnings.	83. 48	86. 07	Decrease..	2. 59	3. 00

* Included in "Conducting transportation."

IOWA FALLS AND SIOUX CITY RAILROAD COMPANY.

The length of the main line from Iowa Falls to Sioux City is 183.69 miles, and the company owns 16.24 miles of sidings, making the total track mileage 199.93.

Inspection of this road was not practicable.

The road is leased to and operated by the Illinois Central Railroad Company. The company owns no equipment.

The company has received patents for 640,256.11 acres of land, of which it has sold 613,808.74, and still retains 26,447.37 acres. The total sum received to June 30, 1886, from sales of these lands is \$4,093,758.78, and there is outstanding on contracts \$148,907.08.

Financial condition of the Iowa Falls and Sioux City Railroad Company, June 30, 1886.

LIABILITIES.

First-mortgage bonds.....	\$2, 800, 000 00
Interest on same	99, 715 00
Accounts payable.....	38, 338 34
Total debt	2, 938, 053 34
Capital stock	4, 600, 000 00
Total stock and debt	7, 538, 053 34

ASSETS.

Road and fixtures	\$7,585,000 00
Real estate—office building.....	10,000 00
Cash	175,193 06
Stocks owned by company	8,800 00
Improvement and protection fund.....	1,450,000 00
Due from other companies on account of leases.....	17,213 01
Total assets.....	9,246,206 06
Surplus.....	1,708,153 32

Comparative statement of the earnings and expenses of the Iowa Falls and Sioux City Railroad Company.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$182,011 65	\$184,763 48	Decrease .	\$2,750 83	1.48
Freight	891,419 95	403,985 49	Decrease .	12,565 54	2.11
Mail	19,867 29	19,851 42	Decrease .	484 13	2.43
Express.....	7,996 85	4,648 05	Increase ..	3,348 80	72.04
Miscellaneous.....	16,833 18	16,357 63	Increase ..	465 55	2.84
Total.....	617,618 42	629,605 07	Decrease .	11,986 65	1.90
EXPENSES.					
Conducting transportation	177,082 98	188,775 06	Decrease .	11,692 08	6.59
Maintenance of way.....	194,539 96	202,668 48	Decrease .	8,128 52	4.11
Motive power* .....	.....	.....	.....	.....	.....
Maintenance of cars.....	68,281 53	74,754 64	Decrease .	6,473 11	8.88
General expenses and taxes.....	312,852 29	319,772 26	Decrease .	7,419 97	2.33
Total.....	752,256 76	785,970 44	Decrease .	33,713 68	4.29
Deficit	124,638 34	156,365 37	Decrease .	21,727 03	13.89
Average miles operated.....	183.69	183.69	.....	.....	.....
Earnings per mile.....	\$3,362 28	\$3,427 54	Decrease .	\$65 26	1.90
Expenses per mile.....	4,095 25	4,278 79	Decrease .	183 54	4.29
Deficit per mile	737 97	851 25	Decrease .	118 28	13.89
Percentage of expenses to earnings	121.77	124.83	Decrease .	3.05	2.44

* Included in "Conducting transportation."

SAINT JOSEPH AND GRAND ISLAND RAILROAD COMPANY.

The mileage of this road is as follows :

	Miles.
Saint Joseph to Elwood (bridge over Missouri River).....	.88
Elwood, Kans., to Hastings, Neb	226.00
Hastings, Neb., to Grand Island, Neb.....	24.82
Total	251.70

The Saint Joseph and Pacific Railroad Company and the Kansas and Nebraska Railway Company were consolidated March 29, 1877, into the Saint Joseph and Western Railroad Company. The latter company, by deed dated February 18, 1880, purchased the Hastings and Grand Island Railroad. In June, 1885, the Saint Joseph and Western and the Hastings and Grand Island Railroads were sold under foreclosure and purchased by a committee of bondholders. Immediately thereafter,

the Saint Joseph and Marysville Railroad Company, a Kansas corporation, was organized to acquire and operate the road from Elwood to Marysville; and the Grand Island and Marysville Railroad Company, a Nebraska corporation, to acquire and operate the road from Grand Island to Marysville. These two corporations were consolidated June 23, 1885, under the corporate title of the Saint Joseph and Grand Island Railroad Company.

That portion of the road between Elwood and Hastings having been aided by a grant of lands, it was inspected by the engineer of this office, whose report thereon is generally favorable.

The entire line from Saint Joseph to Grand Island was opened for business in November, 1879, and from that period to January 1, 1884, was operated by the Union Pacific Railway Company; since the latter date it has been operated as an entirely independent line.

A fund of about \$700,000 has been provided for the purpose of laying the entire line with steel rails, purchasing new equipment, building new depots, replacing wooden bridges with iron, &c. During the year 7,000 tons of 60-pound steel rails and 70,000 new cross-ties were placed in the track, and 5 locomotives and 500 freight cars added to the equipment, which at present consists of 26 locomotives, 17 passenger and baggage cars, and 661 freight cars.

Financial condition of the Saint Joseph and Grand Island Railroad Company, December 31, 1885.

LIABILITIES.

First-mortgage bonds	\$6,860,000 00
Second-mortgage income bonds.....	1,623,000 00
Bonds of constituent companies, certificates, funded interest, &c	196,534 16
Accrued interest on first-mortgage bonds and unpaid coupons.....	77,500 00

Total debt	8,757,034 16
Capital stock	4,600,000 00

Total stock and debt	13,357,034 16
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ASSETS.

Cost of road and fixtures.....	\$12,925,756 39
Accounts receivable.....	78,485 37
Trustees' equipment and improvement fund.....	353,777 77

Total assets.....	13,358,019 53
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Surplus.....	985 37
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Statement of the earnings and expenses of the Saint Joseph and Grand Island Railroad Company for the year ending December 31, 1885.

EARNINGS.

Passenger.....	\$194,038 53
Freight.....	850,605 87
Mail and express.....	36,383 35
Miscellaneous.....	15,801 30

Total.....	1,097,029 05
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EXPENSES.

Conducting transportation	\$238,782 02
Maintenance of way	192,825 66
Motive power.....	167,513 26
Maintenance of cars.....	34,906 93
General expenses and taxes.....	76,122 93
Saint Joseph bridge.....	20,183 14

Total.....	730,333 94
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Net earnings.....	366,695 11
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HANNIBAL AND SAINT JOSEPH RAILROAD COMPANY.

The mileage of this road is as follows :

	Miles
Main line, Hannibal, Mo., to Saint Joseph, Mo.....	206.41
Branch line, Cameron, Mo., to Kansas City, Mo.....	54.3
Branch line, Palmyra, Mo., to West Quincy, Ill.....	12.77
Branch line, Saint Joseph, Mo., to Atchison, Mo.....	19.47
Total.....	292.78

The road is now controlled by the Chicago, Burlington and Quincy Railroad Company.

An inspection of this road was not practicable.

The company owns 71 locomotives, 47 cars in the passenger service, 38 caboose cars, 1,713 freight cars, and 168 miscellaneous.

The company received from the Government a grant of 781,944.83 acres of land. The number of acres sold to December 31, 1885, was 565,333.43, and the amount received from land sales during the year ending that day was \$101,736.53.

Financial condition of the Hannibal and Saint Joseph Railroad Company, June 30, 1886.

LIABILITIES.

Funded debt.....	\$8,135,000 00
Accounts payable	489,108 49
Total debt	8,624,108 49
Capital stock	14,251,724 00
Total stock and debt.....	22,875,832 49

ASSETS.

Road and fixtures.....	\$17,431,208 03
Equipment	3,353,677 16
Farmers' Loan and Trust Company.....	47,775 33
Investments	645,302 79
Sundry advances.....	2,000 00
Accounts and bills receivable.....	348,835 51
Balance of cash accounts.....	339,862 25
Land department	2,316,967 81
Material on hand.....	151,508 45
Total assets.....	24,637,137 35
Surplus.....	1,761,304 86

Comparative statement of the earnings and expenses of the Hannibal and Saint Joseph Railroad Company.

	Year ending December 31, 1885.	Year ending December 31, 1884.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$587, 096 93	\$629, 351 34	Decrease..	\$42, 254 41	6.7
Freight	1, 401, 768 84	1, 659, 129 69	Decrease..	197, 360 85	11.4
Mail.....	60, 304 99	57, 609 19	Increase ..	2, 695 80	4.6
Express	63, 911 74	65, 407 48	Decrease..	1, 495 74	2.3
Miscellaneous.....	290, 810 17	309, 338 55	Decrease..	18, 528.38	5.9
Total.....	2, 463, 892 67	2, 720, 836 25	Decrease..	256, 943 58	9.4

Comparative statement of the earnings and expenses of the Hannibal and Saint Joseph Railroad Company—Continued.

	Year ending December 31, 1885.	Year ending December 31, 1884.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EXPENSES.					
Conducting transportation	\$848,956 75	\$740,748 09	Increase..	\$108,208 66	12.98
Maintenance of way.....	518,814 88	378,244 11	Increase..	145,570 77	28.00
Motive power.....	376,127 28	384,006 53	Decrease .	7,879 25	2.06
Maintenance of cars*.....	.....	.....	.....	.....	.....
General expenses and taxes	151,298 36	183,424 44	Decrease .	32,126 08	17.51
Total.....	1,890,197 27	1,681,423 17	Increase..	208,774 10	12.41
Net earnings.....	573,695 40	1,039,413 02	Decrease .	465,717 62	44.81
Average miles operated	295.24	293.26	Increase..	1.98	0.66
Earnings per mile.....	\$8,345 38	\$9,277 89	Decrease .	\$932 51	\$10.05
Expenses per mile	6,402 28	5,733 56	Increase..	668 67	11.66
Net earnings per mile	1,943 15	3,544 38	Decrease .	1,601 18	45.17
Percentage of expenses to earnings.	76.71	61.79	Increase..	14.92	7.96

* Included in "Motive power."

MISSOURI PACIFIC RAILWAY COMPANY.

This company owns 859 miles of road and leases 136, of which 791 miles are laid with steel rails.

An inspection of this road was impracticable.

Its rolling stock consists of 176 locomotives, 83 passenger cars, 32 baggage, mail, and express, and 6,216 freight cars.

The amount expended by the company during the year 1885 for extraordinary improvements and betterments was \$311,184.99, of which sum \$111,259.82 was for ballast, and \$53,332.12 for new side tracks.

Financial condition of the Missouri Pacific Railway Company, December 31, 1885.

LIABILITIES.

Funded debt.....	\$30,000,000 00
Interest on same, due and accrued.....	512,400 82
December vouchers, payable January 15, 1886.....	2,016,404 90
Saint Louis Bridge and Tunnel Company	41,031 25
Hannibal Bridge Company.....	21,803 76
Hospital account.....	59,058 45

Total debt	32,650,699 18
Capital stock	29,974,800 00

Total stock and debt	62,625,499 18
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ASSETS.

Road and equipment.....	\$41,633,992 52
Supplies and material on hand	1,080,774 01
Investments in stocks and bonds.....	22,650,933 27
Due from agents, conductors, &c.....	1,503,316 33
Cash	549,779 66

Total assets	67,418,795 79
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Surplus	4,793,296 81
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Comparative statement of the earnings and expenses of the Missouri Pacific Railway Company.

	Year ending December 31, 1885.	Year ending December 31, 1884.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$2, 004, 577 69	\$2, 043, 456 96	Decrease .	\$38, 879 27	1.9
Freight	5, 153, 025 42	6, 047, 838 75	Decrease .	894, 813 33	14.7
Mail.....	205, 125 48	214, 150 86	Decrease .	9, 025 38	4.4
Express	102, 897 96	227, 982 91	Decrease .	35, 084 95	33.8
Miscellaneous	387, 936 27	244, 698 04	Increase ..	143, 238 23	58.5
Total.....	7, 943, 562 82	8, 777, 627 52	Decrease .	834, 064 70	10.4
EXPENSES.					
Conducting transportation	1, 582, 084 72	1, 604, 526 48	Decrease .	72, 441 76	4.5
Maintenance of way	1, 062, 066 82	1, 129, 222 29	Decrease .	67, 155 97	6.3
Motive power.....	1, 161, 122 10	1, 254, 828 49	Decrease .	93, 706 39	8.1
Maintenance of cars	315, 544 96	355, 848 76	Decrease .	40, 303 80	12.8
General expenses and taxes	267, 501 13	148, 451 15	Increase ..	119, 049 98	44.6
Total.....	4, 388, 319 23	4, 492, 877 17	Decrease .	154, 557 94	3.4
Net earnings.....	3, 605, 243 59	4, 284, 750 35	Decrease .	679, 506 76	18.8
Percentage of expenses to earnings..	54. 61	51. 18	Increase ..	3. 43	6.7

MISSOURI, KANSAS AND TEXAS RAILWAY COMPANY.

The main line of this company, as now operated, extends from Hannibal, Mo., to Dennison, Tex., 575 miles. The branches in Texas, Indian Territory, and Kansas, owned and leased, make the total mileage, June 30, 1886, 1,386 miles. The portion inspected this year was from Vinita, Ind. Ter., to Junction City, Kans., 235 miles. The portion upon which the land-grant was given lies between the southern line of Kansas and the Union Pacific Railway at Junction City, Kans., a distance of 183.2 miles.

The track is kept in fair condition. The light iron rails which were laid nearly seventeen years ago are still in use upon nearly one-half the length. Steel rails of 52 pounds per yard are used to replace this iron, and with the new ties, 68,000, will considerably improve the track. The bridges are in good order, and appear strong enough for the present weight of rolling stock. The station buildings are generally of moderate size, but quite sufficient for the business of the road. A small part of track is ballasted with stone and cinder.

The rolling stock consists of 155 locomotives, 87 passenger cars equipped with Westinghouse brakes and Miller couplers and platforms, 4,143 freight cars, and 17 miscellaneous cars.

The company has received from the Government 952,913.07 acres of land. The total amount received from the sale of these lands is \$2,874,803.21, and there are outstanding on time sales \$60,439.66.

Financial condition of the Missouri, Kansas and Texas Railway Company, June 30, 1886.

LIABILITIES.	
Funded debt.....	\$41, 842, 269 66
Interest on same.....	999, 605 91
Accounts payable	6 719 03
Land accounts.....	1, 088, 637 23
Total debt.....	43, 937, 231 83
Capital stock	46, 414, 676 45
Total stock and debt	90, 351, 908 28

ASSETS.

Road, fixtures, and equipment.....	\$66,524,701 91
Real estate other than road	124,110 58
Land accounts.....	2,102 39
Cash	48,415 59
Stocks, bonds, and miscellaneous investments.....	18,606,139 75
Accounts receivable.....	15,838 77
Dues from other companies on account.....	1,515,037 48
Total assets.....	86,836,346 47
Deficit.....	3,515,561 81

*Comparative statement of the earnings and expenses of the Missouri, Kansas, and Texas
Railway Company.*

	Year ending June 30, 1883.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$1, 619, 018 43	\$1, 615, 156 45	Increase..	\$3, 861 98	0. 24
Freight.....	4, 681, 979 96	4, 950, 559 46	Decrease .	268, 579 50	5. 42
Mail.....	185, 743 52	186, 218 82	Decrease .	474 80	0. 25
Express.....	162, 750 95	176, 940 63	Decrease .	14, 189 68	8. 02
Miscellaneous.....	72, 062 67	79, 280 75	Decrease .	7, 168 08	9. 05
Total	6, 721, 555 53	7, 008, 105 61	Decrease .	286, 550 08	4. 08
EXPENSES.					
Conducting transportation.....	1, 365, 590 20	1, 348, 818 38	Increase ..	16, 771 82	1. 24
Maintenance of way	1, 234, 697 91	920, 202 34	Increase ..	314, 495 57	34. 17
Motive power.....	1, 112, 550 65	1, 258, 279 51	Decrease .	145, 728 86	11. 58
Maintenance of cars.....	214, 379 38	237, 107 11	Decrease .	22, 727 73	9. 59
General expenses and taxes.....	140, 138 50	131, 666 50	Increase ..	8, 472 00	6. 43
Total.....	4, 067, 356 64	3, 896, 073 84	Increase ..	171, 282 80	4. 39
Net earnings	2, 654, 198 89	3, 112, 031 77	Decrease .	457, 832 83	14. 71
Average miles operated.....	1, 386	1, 386	.....	.....	.....
Earnings per mile.....	\$4, 849 61	\$5, 056 35	Decrease .	\$206 74	4. 08
Expenses per mile.....	2, 934 60	2, 811 02	Increase ..	123 58	4. 40
Net earnings per mile.....	1, 915 01	2, 245 33	Decrease .	830 32	14. 71
Percentage of expenses to earnings	60. 51	55. 59	Increase ..	4. 92	8. 85

SAINT LOUIS, IRON MOUNTAIN AND SOUTHERN RAILWAY COMPANY.

The length of the main line from Saint Louis to Taxarkana is 490 miles, and of the branch lines of the company 433 miles. Of this 773.87 miles is laid with steel rails, and 159.13 with iron.

An inspection of this road was not practicable.

The company owns 144 locomotives, 31 having Westinghouse brakes, 95 passenger cars are fitted with Westinghouse brakes and Miller platforms and couplers, 4,368 freight, and 30 road and miscellaneous cars.

The number of acres of land patented to this company by the United States is 1,389,995.27, of which it has sold 468,525.66 acres, and retains 921,459.61 acres. The amount received by the company for lands is \$1,523,371.41, and there are outstanding on time sales \$659,294.84.

Financial condition of the Saint Louis, Iron Mountain and Southern Railroad Company,
June 30, 1886.

LIABILITIES.

Funded debt.....	\$35,564,482 01
Interest on same	716,472 40
Accounts payable	302,097 78
Due other companies on account.....	2,246,114 07
Total debt	38,829,167 04
Capital stock	22,083,195 00
Total stock and debt.....	60,912,362 04

ASSETS.

Road, fixtures, and equipment.....	\$53,402,526 76
Real estate other than road	419,186 74
Land contracts, land cash, &c.....	2,840,475 47
Cash	256,072 51
Stocks, bonds, and miscellaneous investments	5,776,236 14
Accounts receivable.....	788,331 82
Miscellaneous accounts	293,733 40
Total assets.....	63,776,481 84
Surplus.....	2,864,119 80

Comparative statement of the earnings and expenses of the Saint Louis, Iron Mountain and
Southern Railway Company.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$1,262,030 85	\$1,295,442 51	Decrease ..	\$33,411 66	2.58
Freight.....	5,701,903 07	5,274,036 35	Increase ..	427,866 72	8.11
Mail.....	169,583 28	168,379 84	Increase ..	1,203 44	0.71
Express.....	168,521 17	178,031 12	Decrease ..	4,509 95	2.61
Miscellaneous.....	115,263 82	110,679 64	Increase ..	4,584 18	4.14
Total.....	7,417,302 19	7,021,569 46	Increase ..	395,732 73	5.63
EXPENSES.					
Conducting transportation	1,488,733 52	1,416,621 24	Increase ..	72,112 28	5.09
Maintenance of way.....	747,115 81	754,832 37	Decrease ..	7,216 56	0.96
Motive power	1,031,053 06	1,053,957 14	Decrease ..	22,904 08	2.17
Maintenance of cars.....	229,271 55	387,200 04	Decrease ..	157,929 09	40.78
General expenses and taxes	141,521 97	126,527 87	Increase ..	14,994 10	11.85
Total.....	3,637,695 91	3,738,639 26	Decrease ..	100,943 35	2.79
Net earnings	3,779,606 28	3,282,980 20	Increase ..	496,626 08	15.13
Average miles operated	923.00	918.67	Increase ..	4.33	0.47
Earnings per mile	\$8,036 08	\$7,648 19	Increase ..	\$392 89	5.14
Expenses per mile	8,941 17	4,069 62	Decrease ..	128 45	2.15
Net earnings per mile.....	4,094 91	3,573 57	Increase ..	521 34	14.59
Percentage of expenses to earnings.	49.04	58.24	Decrease ..	4.20	7.88

SAINT LOUIS AND SAN FRANCISCO RAILWAY COMPANY.

Inspection was made in August of the main line from Saint Louis to Seneca at the western line of Missouri. The mileage reported June 30, 1886, is 814.87, as follows:

	Miles.
Saint Louis to Seneca, Mo.....	326.75
Pierce City, Mo., to Wichita, Kans.....	218.25
Plymouth, Mo., to Fort Smith, Ark.....	134.37
Branches in Missouri and Kansas.....	135.50

This company also operates for the Atlantic and Pacific Railroad Company the central division of the latter corporation's road, which is now built from Seneca, Mo., to Sapulpa, Ind. Ter., 112 miles. It runs its trains between Wichita and Halstead, Kans., over the track of the Atchison, Topeka and Santa Fé Railroad, 24.88 miles.

Work has been commenced upon the extension of the Arkansas divisions from Van Buren, Ark., to Paris, Tex., where connection will be made with the Texas and Pacific Railway. The new line will be about 172 miles long, and will probably be completed during the year 1887.

The track, equipment, and buildings have been kept in very good order; considerable additions have been made to the side tracks, and some to the buildings.

The rolling stock consists of 105 locomotives, 81 passenger cars, 3,646 freight and 12 road and miscellaneous cars.

Financial condition of the Saint Louis and San Francisco Railway Company, December 31, 1885.

LIABILITIES.

First-mortgage bonds	\$20,359,500 00
Other funded debt	5,666,500 00
Interest on funded debt	634,701 16
Bills payable	220,752 44
Dividends unpaid	159,180 00
Accounts payable, pay-rolls, and vouchers due other companies.....	1,162,739 86
Total debt.....	28,203,373 46
Capital stock	30,000,000 00
Total stock and debt.....	58,203,373 46

ASSETS.

Road, fixtures, equipment, and real estate	\$51,067,403 83
Fuel, material, and stores on hand	118,866 66
Cash	232,177 88
Company's stocks and bonds owned by company.....	3,977,748 16
Other stocks and bonds	1,491,601 02
Miscellaneous investments	2,860 07
Sinking fund in hands of trustees	11,655 96
Bills and accounts receivable	3,692,856 88
Due from other companies on account of traffic	174,774 80
Total assets	60,769,945 26
Surplus	2,566,571 80

Comparative statement of the earnings and expenses of the Saint Louis and San Francisco Railway Company.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$909, 049 12	\$918, 130 37	Decrease..	\$9, 081 25	0.98
Freight	3, 175, 108 23	3, 269, 942 16	Decrease..	94, 833 93	2.99
Mail	98, 716 16	97, 796 77	Increase ..	919 39	0.94
Express.....	113, 854 29	115, 631 14	Decrease..	1, 776 85	1.53
Miscellaneous.....	146, 138 68	103, 815 35	Increase ..	42, 323 33	41.45
Total.....	4, 442, 806 48	4, 504, 815 79	Decrease..	61, 949 31	1.37
EXPENSES					
Conducting transportation	645, 756 30	618, 147 59	Increase ..	27, 608 71	4.46
Maintenance of way.....	504, 483 51	531, 226 17	Decrease ..	26, 842 66	5.65
Motive power	538, 444 51	517, 523 41	Increase ..	20, 921 10	4.04
Maintenance of cars.....	131, 079 23	169, 886 94	Decrease ..	38, 807 71	22.44
General expenses and taxes	241, 618 22	220, 673 02	Increase ..	20, 945 20	9.49
Total.....	2, 061, 381 77	2, 057, 557 13	Increase ..	3, 824 64	0.18
Net earnings	2, 381, 484 71	2, 447, 258 66	Decrease ..	65, 773 95	2.69
Average miles operated	843. 42	797. 66	Increase ..	45. 76	5.73
Earnings per mile	\$5, 267 68	\$5, 647 53	Decrease ..	\$379 85	6.72
Expenses per mile.....	2, 444 07	2, 579 49	Decrease ..	135 42	5.29
Net earnings per mile.....	2, 823 61	3, 068 04	Decrease ..	244 43	7.98
Percentage of expenses to earnings.	46. 39	45. 67	Increase ..	62	1.36

MEMPHIS AND LITTLE ROCK RAILROAD COMPANY.

This company is now in the hands of trustees appointed by the United States court.

An inspection was found impracticable.

The mileage of this road is as follows:

	Miles.
Memphis to Hopefield, Ark. (ferry owned)	2
Hopefield to Argenta, Ark. (track owned).....	131
Argenta to Little Rock, Ark. (track leased).....	2
Total.....	135

The company received from the Government a grant of 184,185.03 acres of land, but on account of legal complications no sales have been made for some years.

Trustees' statement of the financial condition of the Memphis and Little Rock Railroad Company, June 30, 1886.

LIABILITIES.

Pay-rolls and vouchers.....	\$51, 381 60
Due other companies on account of traffic.....	2, 039 49
Due Memphis and Little Rock Railroad Company	123, 084 52
Interest	993 70
Total	177, 499 31

ASSETS.

Real estate, other than road	\$8,072 00
Land contracts, land cash, &c	8,567 71
Fuel, material, and stores on hand	40,389 31
Cash	48,233 07
Bills and accounts receivable	40,193 29
Suspense accounts	3,718 49
Cash in hands of trustees	362,000 00
Total	511,173 87
Surplus	333,674 56

Comparative statement of the earnings and expenses of the Memphis and Little Rock Railroad Company.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger	\$344,725 16	\$368,194 21	Decrease..	\$21,469 05	5.68
Freight	350,266 33	312,470 19	Increase ..	37,796 14	12.09
Mail	13,933 07	15,946 84	Decrease..	2,013 77	12.62
Express	18,266 08	22,685 47	Decrease..	4,419 39	19.48
Miscellaneous	*3,711 51	*4,675 86	Decrease..	964 37	20.62
Total.....	723,479 13	712,620 83	Increase ..	10,858 30	1.52
EXPENSES.					
Conducting transportation	189,102 80	205,049 76	Decrease .	15,946 96	7.77
Maintenance of way.....	109,988 85	167,396 37	Increase ..	2,592 48	1.55
Motive power	91,368 93	90,961 81	Increase ..	407 12	0.44
Maintenance of cars	27,475 72	22,998 23	Increase ..	4,477 49	19.46
General expenses and taxes	57,758 50	59,959 37	Decrease .	2,200 87	3.67
Total.....	535,694 80	546,365 51	Decrease .	10,670 74	1.95
Net earnings	187,784 33	166,255 29	Increase ..	21,529 04	12.95
Average miles operated.....	133.00	133.00	Decrease .	2.00	1.48
Earnings per mile.....	\$5.439 69	\$5,278 67	Increase ..	\$164 02	3.05
Expenses per mile	4,027 78	4,047 15	Decrease .	19 37	0.47
Net earnings per mile.....	1,411 91	1,231 52	Increase ..	180 39	14.64
Percentage of expenses to earnings.	74.04	76.67	Decrease .	2.63	3.43

* Deduction; balance car service.

ATCHISON, TOPEKA AND SANTA FE RAILROAD COMPANY.

The road was inspected in August by the engineer. The total mileage operated in the company's interest is 2,829, as follows:

	Miles.
The Atchison system	1,868
Southern Kansas system	557
Sonora system	353
Owned with Union Pacific	51

The rolling stock included 353 locomotives, 260 of which have automatic brakes; 248 passenger and baggage cars, with automatic brakes and Miller coupler and platform; 9,659 freight cars, 7,811 of which have train brakes, and 775 cars for road and repair and other uses.

The main track in Kansas has steel rails throughout, weighing from 52 to 67 pounds per yard. Number of ties per mile, 3,000. Forty per

cent. of the track is well ballasted with gravel and broken stone, and is kept in excellent order. The whole equipment is first-class, and the other property well maintained.

The shops at Topeka seem to be admirably arranged and well furnished with machinery and tools. The station buildings along the road are well built and convenient.

The sum of \$201,182.76 was expended during the year 1885 in improving the road, and \$331,678.82 in improving rolling stock.

The company has received from the Government 3,328,195.40 acres of land, of which it has sold \$2,980,941.29 acres, and still owns 347,254.12. It has received \$9,541,252.94 for lands sold, and the sum of \$1,586,265.97 is due on time sales.

Financial condition of the Atchison, Topeka and Santa Fé Railroad Company, December 31, 1885.

LIABILITIES.

First-mortgage bonds.....	\$7,041,000 00
Interest on same	246,435 00
Other funded debt	23,927,000 00
Interest on same	549,480 00
Dividends unpaid.....	670,520 50
Notes and accounts payable	952,499 00
Pay-rolls and vouchers.....	1,395,146 11
Due other companies.....	82,822 44
Renewal and improvement account.....	500,000 00
Fire-insurance fund account.....	139,646 88
Land-grant trust.....	2,801,874 23
Sundry book and suspense accounts.....	590,410 23
Canceled-bond account.....	2,203,000 00
Total debt.....	41,299,834 47
Capital stock	56,913,250 00
Total stock and debt.....	98,213,084 47

ASSETS.

Road and fixtures.....	\$29,142,269 66
Equipment	9,229,151 98
Interest in auxiliary roads	53,108,225 55
Seven-eighths interest in steamship City of Topeka	121,517 97
Fuel, material, and stores on hand	1,241,005 12
Cash	1,706,376 88
Pottawatomie land account.....	27,229 66
Bonds owned by company in auxiliary roads	1,949,000 00
Miscellaneous investments	1,993,917 95
Due from the United States.....	341,172 58
Sinking fund in hand of trustees.....	15,728 03
Bills, notes, and accounts receivable	1,016,062 11
Advances to Atlantic and Pacific Railroad Company	2,608,982 11
Advances to California Southern Railroad Company.....	1,569,855 74
Due from other companies on account of traffic and advances.....	1,014,128 14
Total assets.....	105,084,623 42
Surplus.....	6,871,538 95

Comparative statement of the earnings and expenses of the Atchison, Topeka and Santa Fe Railroad Company.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$3, 219, 618 60	\$3, 009, 520 30	Increase ..	\$210, 098 30	6.98
Freight	9, 194, 783 14	9, 768, 767 54	Decrease..	573, 924 40	5.88
Mail	281, 664 04	271, 262 82	Increase ..	10, 401 22	3.83
Express.....	305, 172 12	298, 865 72	Increase ..	6 306 40	2.11
Miscellaneous.....	141, 427 51	121, 183 08	Increase ..	20, 244 43	16.71
Total.....	18, 142, 665 41	18, 469, 599 46	Decrease..	326, 934 05	2.42
EXPENSES.					
Conducting transportation	1, 770, 451 10	1, 874, 298 66	Decrease .	103, 847 56	5.54
Maintenance of way	1, 736, 119 12	2, 263, 845 49	Decrease .	527, 726 37	23.81
Motive power	1, 741, 740 16	1, 774, 704 82	Decrease .	32, 964 66	1.86
Maintenance of cars.....	871, 256 92	930, 841 48	Decrease .	59, 584 56	6.40
General expenses and taxes.....	322, 872 95	825, 913 30	Decrease .	3, 040 35	0.93
Total.....	6, 442, 440 25	7, 169, 603 75	Decrease .	727, 163 50	10.14
Net earnings.....	6, 700, 225 16	6, 299, 995 71	Increase ..	400, 229 45	6.35
Average miles operated	1, 867.98	1, 852.47	Increase ..	15.51	0.83
Earnings per mile	\$7, 035 76	\$7, 271 15	Decrease .	\$235 39	3.24
Expenses per mile.....	3, 448 88	3, 870 29	Decrease .	421 41	10.88
Net earnings per mile	3, 586 88	3, 400 86	Increase ..	186 02	5.47
Percentage of expenses to earnings..	49.02	53.22	Decrease .	4.20	7.89

ATLANTIC AND PACIFIC RAILROAD COMPANY.

The main line of the road of this company, from Atlantic and Pacific Junction, near Albuquerque, N. Mex., to Mojave, is 818.40 miles in length. The Central division, owned by this company but operated by the Saint Louis and San Francisco Railway Company, extends from Seneca, Mo., to Red Fork, Ind. T., a distance of 102 miles.

An inspection of this road was not practicable.

The sum of \$276,563.15 has been expended during the year for new construction, and \$28,208.58 for new equipment.

The company owns 47 locomotives, 17 of which are fitted with Westinghouse brakes; 17 passenger cars, all of which have air-brakes and Miller couplers and platforms; 1,219 freight cars and 198 miscellaneous cars.

Since the reorganization, in 1880, the sum of \$577,702 has been received from the sale of lands, \$120,235 is due on time sales, and the company still owns 23,037.36 acres of land patented by the Government.

Financial condition of the Atlantic and Pacific Railroad Company, December 31, 1885.

LIABILITIES.	
First-mortgage bonds	\$18, 586, 534 00
Interest on same	485, 400 00
Other funded debt	12, 450, 000 00
Bills payable*	5, 800, 701 90

* Two million seven hundred and seventy-four thousand five hundred and thirteen dollars and sixty-four cents has been paid by the sale of lands to a trustee, but the notes for this amount have not yet been surrendered and the account "bills payable" adjusted.

Accounts payable.....	\$1,511,417 2
Pay-rolls and vouchers.....	166,886 90
Total debt.....	39,000,940 02
Capital stock.....	64,810,300 00
Total stock and debt.....	103,811,240 02

ASSETS.

Road, fixtures, and equipment	\$101,561,371 86
Fuel, material, and stores on hand.....	250,757 80
Cash	583,834 98
Accounts receivable.....	376,192 71
Due from United States.....	38,747 03
Total assets	102,840,904 38
Deficit	970,335 64

Comparative statement of the earnings and expenses of the Atlantic and Pacific Railroad Company.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$444,893 36	\$353,893 14	Increase ..	\$91,500 22	25.85
Freight	986,425 99	981,828 96	Increase ..	4,597 03	0.47
Mail	41,693 32	51,454 17	Decrease..	9,760 85	18.55
Express.....	64,519 09	43,983 06	Increase ..	20,536 03	46.90
Miscellaneous.....	6,802 10	5,997 00	Increase ..	805 10	12.43
Total.....	1,544,833 86	1,436,656 33	Increase ..	107,677 53	7.46
EXPENSES.					
Conducting transportation.....	922,187 92	816,534 83	Increase..	105,653 09	12.94
Maintenance of way.....	311,340 02	370,053 99	Decrease..	58,713 97	15.87
Motive power.....	104,168 40	96,820 47	Increase..	7,347 93	7.59
Maintenance of cars	118,740 71	98,010 60	Increase..	20,730 11	21.15
General expenses and taxes.....	89,919 57	145,786 62	Decrease..	55,867 05	23.33
Total	1,546,356 62	1,527,206 51	Increase..	19,150 11	1.25
Deficit.....	2,022 76	90,550 18	Decrease..	88,527 42	97.78
Average miles operated.....	815.00	758.30	Increase..	56.70	7.48
Earnings per mile.....	\$1,694 89	\$1,894 57	Increase..	\$32	0.01
Expenses per mile	1,897 37	2,013 98	Decrease..	116 61	5.79
Deficit per mile	2 48	119 41	Decrease..	116 93	97.92
Percentage of expenses to earnings	100.13	106.80	Decrease..	6.17	5.88

TEXAS AND PACIFIC RAILWAY COMPANY.

This company, although repeatedly requested by me during the last summer, has failed to make the annual report required by section 13 of the act of March 3, 1871, for the year ending June 30, 1886.

It has, however, filed its report for the New Orleans Pacific Railway Company, which was consolidated with it June 20, 1881. This last mentioned company, being now a part of the Texas and Pacific, extends from New Orleans to Shreveport, La., a distance, including two short branches at Baton Rouge and Westwego, of 336 miles.

No inspection was made of this road.

The New Orleans and Pacific Railroad Company has received from the United States 67,967.70 acres of land, but the report states that no sales have been consummated.

SOUTHERN PACIFIC RAILROAD COMPANY.

This road was inspected by the engineer in August. The road from El Paso to Yuma has been kept in very good condition. Upon the line west from Yuma there were in the latter part of August very serious wash-outs, extending as far as Walters, making in all nearly 40 miles of broken track. Repairs were vigorously prosecuted, so that through trains were delayed only a few days, and no damage was suffered by any of the trains. The remainder of the road to Goshen, the northern terminus, was found in excellent condition. The changes of line in Soledad and Caliente Cañons, which were rendered necessary by the extraordinary floods in January last, have been completed, and that portion seems now entirely removed from danger by similar damage. A new Howe truss bridge has been built over the Colorado River at Yuma. Thirty-five miles of steel rails and 140,000 new ties have been placed in the track, 15 miles of track have been ballasted with coarse sand and gravel, nearly 3 miles of side track built, several new buildings have been constructed at the smaller stations, water-pipe lines extended, and a considerable enlargement of the passenger house at Los Angeles, to provide more rooms for the hotel and offices of that division.

The rolling stock is in very good condition and is apparently sufficient for the ordinary business of the line.

The northern division, from San Francisco to Soledad and San Arno, a distance of 183 miles, was also inspected. The track, buildings, and equipment of this division are kept in very good condition, and the business seems carefully managed. The extension of the road from Soledad towards the main line near Newhall has been so far advanced that regular trains will no doubt be running as far as San Miguel by November of the present year. This will be an addition of 65 miles, making the distance from San Francisco to San Miguel 208 miles.

The great improvements which have been made at Monterey render that one of the most attractive resorts of the country, and have been the means of bringing an excellent and steadily increasing passenger business to this road.

The company now operates in this division 220 miles, which will be increased considerably during the next year.

This company has received by patent from the Government 1,228,456.46 acres of land, of which 961,950.38 acres have been sold, leaving in the hands of the company 266,506.08 acres. The amount received from land sales is \$3,467,681.55, and there are now outstanding on time sales \$2,472,541.53.

Financial condition of the Southern Pacific Railroad Company, June 30, 1886.

LIABILITIES.

First-mortgage bonds	\$32,599,000 00
Interest on same	3,645 00
Accounts payable	528,394 46
Total debt	33,131,039 46
Capital stock	44,039,100 00
Total stock and debt	<u>77,170,139 46</u>

ASSETS.	
Road and fixtures	\$75,892,242 04
Equipment	3,325,258 11
Real estate other than road	660,475 32
Cash	5,483 98
Accounts receivable	1,013,762 31
Due from United States	10,230 99
Total assets.....	80,907,452 75
Surplus.....	3,737,313 29

Comparative statement of the earnings and expenses of the Southern Pacific Railroad Company, June 30, 1886.

	Year ending June 30, 1886.	Year ending June 30, 1885.	Difference.		
			Increase or decrease.	Amount.	Per cent.
EARNINGS.					
Passenger.....	\$615,696 32	\$641,665 61	Decrease ..	\$25,969 29	4.04
Freight	578,224 51	774,552 07	Decrease ..	196,327 56	25.36
Mail	13,571 76	13,571 76	.....	.....	.....
Express.....	17,023 12	19,162 18	Decrease ..	2,139 06	11.14
Miscellaneous.....	44,818 85	39,933 18	Increase ..	4,885 67	12.23
Total	1,269,334 56	1,488,884 80	Decrease ..	219,550 24	14.74
EXPENSES.					
Conducting transportation	199,035 45	294,193 84	Decrease..	95,158 39	32.94
Maintenance of way.....	178,927 99	205,342 04	Decrease..	26,414 05	12.86
Motive power	178,552 87	223,435 16	Decrease..	44,882 29	25.00
Maintenance of cars.....	44,787 50	59,798 41	Decrease..	15,010 91	21.19
General expenses and taxes	157,085 71	172,391 66	Decrease..	15,305 95	8.87
Total	758,339 52	955,161 11	Decrease ..	196,821 59	20.60
Net earnings.....	\$510,995 04	\$533,723 69	Decrease ..	\$22,728 65	4.25
Average miles operated	202.21	202.21	.....	.....	.....
Earnings per mile.....	6,277 30	7,863 06	Decrease..	1,085 76	14.74
Expenses per mile.....	3,750 25	4,723 61	Decrease..	973,36	20.60
Net earnings per mile.....	2,527 05	2,639 45	Decrease..	112 40	4.25
Percentage of expenses to earnings.	59.74	64.15	Decrease..	4.41	6.87

Most respectfully, your obedient servant,

Hon. L. Q. C. LAMAR,
Secretary of the Interior.

J. E. JOHNSTON,
Commissioner.

REPORT OF THE COMMISSIONER OF PENSIONS.

To the Hon. THE SECRETARY OF THE INTERIOR:

SIR: I have the honor to submit herewith the annual statement showing the operations of this Bureau for the fiscal year ending June 30, 1886.

Table No. 1 shows as follows:

There were at the close of the year 365,783 pensioners, classified as follows: 265,854 Army invalids; 80,162 Army widows, minor children, and dependent relatives; 2,953 Navy invalids; 1,878 Navy widows, minor children, and dependent relatives; 1,539 survivors of the war of

1812, and 13,397 widows of those who served in that war, showing a diminution in survivors during the year of 1,406, and of widows of 3,815.

There were added to the rolls during the year the names of 40,857 new pensioners, and the names of 2,229 whose pensions had been previously dropped were restored to the rolls; making an aggregate of 43,086 pensioners added during the year.

During the same period the names of 22,089 pensioners were dropped from the rolls for various causes, leaving a net increase to the rolls of 20,658 names.

The average annual value of each pension at the close of the year is shown to be \$122.23, a gain of average annual value over last year of \$11.88. The aggregate annual value of all pensions is \$44,708,027.44: an increase of like value for the year of \$6,617,041.51.

The amount paid for pensions during the year was \$63,797,831.61; a decrease in amount over the previous year of \$1,135,456.51; a difference due to the difference in amounts of "arrearages" paid.

The difference between the amount paid and the annual values is due to first payments, including "accrued" and "arrears."

The amount paid to 37,887 new pensioners during the year upon first payment was \$22,137,054.16; and there remained in the hands of the several pension agents 5,526 of this class unpaid at the close of business on the 30th day of June, on which there was due \$2,879,933.42.

Table No. 2 shows the various causes for which the names of 22,089 pensioners were dropped from the rolls, classifying what is termed the "widows' roll" so as to show the number of widows with, and those without, minor children; the number of minor children who were pensioners in their own right, and the number of dependent mothers and fathers. It also shows the whole number of pensioners on the roll, with a like subdivision of the widows' class.

Table No. 3 exhibits the amount of appropriations and balances available for payment of pensions for 1885-'86.

Table No. 4 exhibits the amount paid out on account of pensions by each agent, and the causes of disbursement therefor, as shown by their accounts current. It also shows a disbursement during the year of \$39,185.96 for payment of "arrears of pensions" in cases where the original pension was granted prior to June 25, 1879, and the date of commencement of pension was subsequent to discharge or death. The act of June 25, 1879, provided for arrears of this class, and the disbursements have been kept separate from those of regular pensions. Of the funds to pay this class there remains a balance of \$454,065.67, which is not, as in the case of other appropriations, covered into the Treasury at the close of the year.

Table No. 5 exhibits the amount of rent paid by each pension agent during the fiscal year ending June 30, 1886.

Table No. 6 shows the number of pensioners on the roll at each agency by the several classes, and compares the items in the aggregate with those of the previous years. It shows also the increase at each agency for the year.

Table No. 7 shows the number of original pension claims of each class filed year by year since 1861; the number allowed, and the number of pensioners on the roll at the close of each year. In this statement it appears that 591,102 claims have been filed during that period on account of disability, and 348,799 claims have been filed on account of death alleged to be due to causes originating in the service, claims

for this latter class having been filed by widows, minor children, and dependent relatives.

There have been allowed of the invalid claims 332,141; of the widows and dependent relatives' claims, 229,435; a total of 561,576.

Since 1871, 78,834 claims for pension on account of service during the war of 1812 (provided for by acts of 1871 and 1878) have been filed. Of this number 34,697 have been filed by the surviving soldiers and sailors, and 44,137 have been filed by the widows of those who served in that war, making a total number of claims under said acts for such service of 78,834. Only 24 original survivors' claims have been filed under this law during the past fiscal year, and only 304 on account of widows for the same period.

It thus appears that in the aggregate 1,018,735 pension claims have been filed since 1861, and in the same period 621,754 claims have been allowed of all classes. The number of pensioners on the roll at the close of each year is stated. The amount paid for pensions since 1861 is \$808,624,811.57.

Table No. 8 shows the number of each class of claims on the files of the office at the commencement of the year; the number filed during the year, and the number admitted; the number rejected during the same period, and the number of each class which were pending and on the rejected files at the close of the year. There is also shown in this table the number of bounty land claims received, allowed, rejected, and remaining on the files.

Table No. 9, which follows, is a comparative statement of pension claims of all classes, settled by allowance and rejection, for the years 1881, 1882, 1883, 1884, 1885, and 1886.

CERTIFICATES.

Table No. 10 exhibits the issue of certificates from this office during the fiscal year beginning July 1, 1885, and closing June 30, 1886, and shows, including the issue of 79,989 widows and dependent relatives increase certificates, a grand total for the year of 161,416 certificates.

SPECIAL EXAMINATION DIVISION.

Table No. 11 shows in brief the operations of the Special Examination Division of the office during the year. It sets forth the number of claims acted upon by said division, the amount of savings accredited to this service, and the expenditure on account thereof, except salaries.

It will be noticed that while the average number of examiners has been diminished, the aggregate of work done is handsomely increased. The cost has been also considerably diminished. The amount of expenses, exclusive of salaries, is about \$48,000 less than the preceding year.

There were examined and disposed of by the division during the year by submission to the Board of Review, &c., 18,786 cases.

CRIMINAL PROSECUTION.

Two hundred and seventy-eight criminal prosecutions have been certified to the Department of Justice. There have been 127 convictions during the year for offenses against the pension laws. Two hundred and eighty-four cases were on the 30th of June awaiting action in the Federal courts. The prosecutions are for offenses against almost all the

criminal clauses of the pension law, relating to defrauding of pensioners, false impersonations of dead pensioners, embezzlements in office, &c.

The result of the work in this division has been gratifying. It has saved millions of money to the public Treasury, and the new system of organization of the division, it is believed, has reduced its expenses to the minimum and increased its efficiency to the maximum point.

PENSION AGENCIES.

At the date of his last annual report the Commissioner called attention to the steps then being taken for the revision and correction of the pension-rolls of the various agencies. The result of the year's work is shown in the number of those whose names have been dropped from the rolls. The causes for which the droppings have been ordered have been tabulated.

In so great a field of operations as was covered by this investigation, embracing the entire territory of the United States, it was not possible that mistakes should not have occasionally occurred, but where they did occur and the attention of the office is called to their existence, remedies are extended as promptly as possible.

Table No. 12 shows the different monthly rates of pension paid to Army and Navy invalids, together with the number of pensioners of these classes and of each of them. It will be seen that there are 131 different rates of pension paid.

Table No. 13 gives the location, and geographical limits of each pension agency, the name of each agent, and the term of his service during the fiscal year, and the balance of the funds remaining in the hands of each agent at the close of the year.

Table No. 14 exhibits the amount paid for pensions to the survivors of the war of 1812, and to the widows of those who served in that war since 1871.

Table No. 15 shows the number of Army invalid claims allowed each year since 1861, classified and arranged so that in each year's allowance is shown in what years the claims were filed for all the preceding, as well as the one in which the allowance was made. It also shows the percentage of claims allowed out of those filed each year.

Table No. 16 shows the number of each class of Army pension claims filed since 1861 on account of disability or death from causes originating in the service since March, 1861. It also shows the total number admitted of each class named, and so arranged as to show these results by military service in each State and Territory.

Table No. 17 exhibits the number of men in service from each State and Territory in the war of 1861-'65, and the number of men when reduced to the basis of three years' term of service.

DISTRIBUTION.

Table No. 18 exhibits the number of pensioners by classes in each county in each State and Territory in the United States and in each foreign country; also the amount being disbursed in each county per month to each class, on a basis of one-third the amount paid, for the quarter ending June 3, 1886, being the monthly rate. There are in the United States 2,647 counties, and there are but 118 of these in which pensions are not being paid. Of the 118 non-pension counties, 40 are in Texas, 20 in Georgia, 9 in the Indian Territory, 7 each in Utah and Dakota, 6 each in Louisiana and Mississippi, 4 in Florida, 3 in Arkan-

sas, 2 each in Alabama, Minnesota, Montana, Nevada, and North Carolina, and 1 each in California, Colorado, Idaho, Tennessee, Virginia, and Wisconsin. There are 1,691 pensions paid in 35 foreign countries. A study of this table will exhibit how widely diffused are the benefactions of the pension system.

In this connection it may be well to say that an examination of the rolls of the pension agencies conducted in February and March last shows that there were upon the pension rolls prior to the date of the report, April 1, 1886, 8,095 pensioners pensioned on account of loss of right arm, left arm, both arms, right foot, left foot, both feet, right hand, left hand, both hands, right leg, left leg, both legs. There were 119,236 other pensions for wounds in various parts of the body; 46,865 for injuries; 162,728 for disease. The locations of the wounds, the places of the amputations, and the character and locations of the various disorders and diseases is given at length in the report of April 1, on file in the office, but it is so voluminous, and so much more valuable to the professional man than to the public generally, that in the opinion of the Commissioner it does not require printing, and therefore the general results alone are given.

The discrepancies existing between the total on the rolls and this exhibit is explained by the fact that the investigation upon which this report is made was concluded in March; by the presence in the aggregate of "service" and "special" act pensions, &c. The records are now kept so as to show day by day the causes for which pensions are issued, and future reports may be expected to exhibit the condition of the lists in this regard with accuracy.

INDIGENT SOLDIERS AND SAILORS.

About the first of the present calendar year I directed an investigation to be made with a view to determine the number of soldiers and sailors who having served in the Army and Navy of the United States, were supported in whole or in part from the public funds or organized charities. To this end the gentleman having charge of this investigation communicated with the county officers, clerks of courts, county judges, overseers of the poor, &c. The reports as to Connecticut and Michigan were made by State officers. Two of the States, New Jersey and Delaware, did not furnish the information as called for. Partial information has been furnished from nearly all the remaining States, however, and full reports have been received from 1,240 counties of the United States. The inquiry does not include those in the soldiers' homes supported by the United States. Upon the information thus furnished computations were made which are believed to exhibit approximately correct results. The number so found receiving support, as before stated, is, in round numbers, 9,000.

The oldest man receiving public support was one hundred and three years of age. The mean age was fifty-seven years. The youngest man was twenty-one years of age. Forty-eight+ per cent. of all so receiving support were native born, and 51+ per cent. were foreign born. Thirteen per cent. of the total number reported were pensioners; 86 per cent. were non-pensioners; 45 per cent. were married men; 54 per cent. unmarried men; 19 per cent. of the total number actually reported were blind or insane.

These statements and figures represent the existing condition of the indigent, whether their ailments be due to the service or to other causes.

ACT OF MARCH 19, 1886—WIDOWS AND DEPENDENTS' INCREASE.

On the 19th of March, 1886, an act was approved by which the pensions of widows and dependents, including minors and dependent fathers and mothers, were increased from \$8 to \$12 per month. On the 4th day of June the increase certificates for the beneficiaries of this act had been placed in their hands, without a dollar of cost in any shape to them, and the work thus accomplished must be added to the total already given, and shows that during the course of a year there have been 161,416 certificates of all classes issued from this office. (See Table 10.)

AMPUTATIONS ACT.

The Commissioner reports with gratification that the suggestions contained in his report of a year ago in regard to amputation cases have been enacted into law. Some 6,000 of the cases to be increased under said enactment have already been adjudicated, and the remaining number will be adjudicated at a very early day.

PRIVATE ACTS.

From January 1, 1861, until December 1, 1885, 1,967 private pension acts had been approved. Since that date 644 such acts have been approved, and certificates issued in nearly every case, the delay in some cases being due to the necessity of medical examinations in cases where the rate is not fixed in the special laws.

LEGISLATIVE SUGGESTIONS RENEWED, ACTED UPON, ETC.

The suggestions of the last annual report in regard to postage and the use of penalty envelopes have been enacted into law, and have resulted in the simplification of accounts and, I think, a considerable saving to the Government.

The remaining suggestions of that report are again respectfully submitted for your consideration.

MEXICAN WAR PENSIONS.

The subject of pensions to the soldiers of the Mexican war is before the Congress and people. I need not add one word in favor of their claims. They have passed the point of argument; all agree to their just foundation.

THE ARMY AND NAVY SURVIVORS' DIVISION.

Table 21 exhibits the workings during the past year of the Army and Navy survivors' division. It was established as a separate division some fourteen months prior to the period at which this report closes. The table speaks for itself as to the quantity and character of the work performed. That work has been of great assistance to claimants and of protection to the Government. Many a worthy claimant who had reached the end of his own resources, and was unable to find his scattered witnesses, has, by the aid of this division, been supplied with the post-office addresses of those whose testimony was requisite to the completion of his case. Through this division the great machinery of the Grand Army of the Republic has been utilized for the benefit of comrades, and there are

few posts that are not now in correspondence with this office. The most important witnesses for the establishment of the truth in regard to any given claim, after the records, are the regimental surgeons. The addresses of 5,000 of them are now filed in this division, and its chief reports to me that he has had the unvarying assistance of the officers charged with the records of the War Department in furnishing information by which the records of this office are extended and pushed to completion.

I have strong hopes that during the coming year the efficiency and value of this division will be more thoroughly demonstrated to all concerned.

MAIL DIVISION.

Table 20 exhibits the work done by the Mail Division, showing the amount of money received in the mail, the amount of postage stamps received in the mail, and the enormous correspondence of the office. An examination of this table will show why there is occasional delay in the transaction of the business of the office. Two millions and more of letters, packages, &c., were received during the year. A million and a half of replies were sent, which is believed to have brought the correspondence up very closely to date. These letters of reply are of course prepared in the various divisions of the office, but are all forwarded through the Mail Division.

RECORD DIVISION.

The work of the Record Division has been greatly increased. During the past year 34,960 invalid applications were received; 13,233 widow's applications and 93,195 increase applications, a total increase over the preceding year of 36,724 applications. This work was done with an average present working force of 47 clerks, a decrease of 25 per cent., and the work is by far the greatest ever accomplished in the division. The saving in clerical hire in this division is about \$11,000 per annum.

LAW DIVISION.

The records of the Law Division, which measure with something of accuracy the character of the work being done in the office, show that from rejections, reratings, and all other action with which fault would be likely to be found by claimants, there have been filed with the Secretary of the Interior during the year 2,717 appeals—a very small docket of appeals, considering the great number of cases passed upon. (See Table 19.)

STATIONERY AND ACCOUNTS DIVISION.

The expenditures in this division have been less than those of the preceding year for stationery, printing, and binding by the amount of \$13,683.55, aggregating for the past year \$46,034.83, as against \$59,718.38 for the preceding year.

Owing to the great expense of furnishing the new Pension building, the outlay for miscellaneous supplies (including carpets, new desks, and all supplies) has reached \$44,604.64.

THE ADJUDICATING AND REVIEW BOARDS

of the office are the Agents, Army and Navy Survivors, Certificates, Eastern, Law, Mail, Medical, Middle, Old War and Navy, Review and Re-Review, Records, Southern, Special Examination, Stationery and Accounts, and Western, presided over respectively by H. C. Bell, F. A.

Butts, J. E. Smith, F. Mack, J. M. Ward, D. L. Gitt, John Campbell, W. P. Davis, William McE. Dye, J. R. Van Mater, F. W. Poor, C. R. Faulkner, F. C. Peck, A. S. Coleman, C. F. Gilliam, and A. A. Aspinwall.

The duties of some of these divisions are purely of bureau character, the adjudicating divisions being the Eastern, Middle, Old War and Navy, Southern, Western, and the Boards of Review and Re-Review, and the Special Examination Division. The mass of the work of the office in the adjudication of claims is performed by the men within these divisions, the remaining divisions being auxiliary but nevertheless essential in handling and dispatching the business confided to this office.

UNEXPENDED APPROPRIATIONS.

For the salaries of officers, employés, special examiners, per diem, and expenses of clerks detailed as special examiners, and per diem and expenses of special examiners there remained at the close of the year the sum of \$310,531.47, which has been covered back into the Treasury of the United States.*

The decrease in the clerical force during the fiscal year from all causes has averaged about 100 clerks. This does not include the fees of examining surgeons, which depend wholly upon the volume of business, surgeons being paid a given sum for each examination.

I append the official statement of the chief clerk, showing the record of leaves, sick and annual, for this year and the year 1884-'85.

JOHN C. BLACK,
Commissioner.

REPORT OF THE COMMISSIONER OF PATENTS.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., October 1, 1886.

SIR: I am much gratified at being able to inform you that the current business of this office is in much better and more prosperous condition than when you assumed charge of the Department of the Interior. At that time business was largely in arrears; the average time which an applicant for patent was required to wait after the filing of his application and before the same could be reached for examination was five and one-half months, and in some of the divisions he must wait from twelve to thirteen. At the end of the last fiscal year such divisions were, on an average, three months in arrears, and but two were six months behind.

The present Congress dealt liberally with the Patent Office, and provided all the force which is really needed. I expect to be able to bring the work substantially up to date within the next few months, and I hope to so maintain it.

There is no subject to which I desire to call your especial attention at the present time, except the following:

First. The Patent Office imperatively needs more room.

Second. The subscription price of the Official Gazette should be increased to at least \$7.50 per year.

Third. Some provision of law should be made by which each of the

* Of this amount \$71,190.90 is due, in part, to the operations of the statute of March 3, 1885; the remainder to the office management.

Federal courts should be required to furnish immediately to the Patent Office, for publication, a certified copy of any judgment, decree, decision, or opinion hereafter made or filed in any patent case.

Fourth. Section 4885, Revised Statutes, relating to the date which a patent shall bear; section 4887 of said statutes, in regard to the limitation of a patent; section 4898, providing for the assignment of patents and the record of such assignments; section 4930, relating to the reimbursement of persons who have, through mistake, paid money into the Treasury for fees accruing at this office, should each and all be carefully amended.

The following is an exhibit in detail of the business of the office for the fiscal year ending June 30, 1886:

Number of applications for patents received	37,685
Number of applications for design patents received	731
Number of applications for reissue patents received.....	168
Number of applications for registration of trade-marks	1,292
Number of applications for registration of labels	792
Total.....	40,678
Number of caveats filed.....	2,586
Number of patents granted, including reissues and designs	24,134
Number of trade-marks registered.....	1,083
Number of labels registered	397
Total.....	25,619
Number of patents withheld for non-payment of final fees.....	3,758

RECEIPTS AND EXPENDITURES.

Receipts from all sources.....	\$1,200,167 80
Expenditures (including printing and binding and contingent expenses)	882,249 63
Surplus.....	213,918 17

COMPARATIVE STATEMENT SHOWING THE INCREASE IN THE WORK.

Number of applications for patents (including reissues, designs, trade-marks, and labels) received during the fiscal year ending June 30—	
1882	30,063
1883	35,734
1884	38,822
1885	35,683
1886	40,678

NUMBER OF APPLICATIONS AWAITING ACTION ON THE PART OF THE OFFICE.

On July 1, 1885	5,786
On July 1, 1886	6,712
Increase over July 1, 1885, 16 per cent., or	926

SUMMARY.

Receipts for the fiscal year ending—	
June 30, 1882	\$930,864 14
June 30, 1883	1,095,884 70
June 30, 1884.....	1,145,433 10
June 30, 1885.....	1,074,974 35
June 30, 1886.....	1,205,167 80
The entire disbursement made specifically for and on behalf of the Patent Office from January 1, 1885, to December 31, 1885, both inclusive, equals.....	728,450 30

The approximate amount expended by the Department of the Interior on account of this office during the same time equals	\$295,928 49
The aggregate amount of expenditures, therefore, is	1,024,378 85
The receipts of this office during the same time aggregate	1,188,089 15
We therefore turned into the Treasury during the calendar year 1885.	163,710 30
Making a balance in the Treasury of the United States on account of Patent Office fund of very nearly	3,000,000 00

Very respectfully your obedient servant,

M. V. MONTGOMERY,
Commissioner.

The SECRETARY OF THE INTERIOR.

REPORT OF THE ARCHITECT OF THE UNITED STATES CAPITOL.

OFFICE OF ARCHITECT UNITED STATES CAPITOL,
Washington, D. C., July 1, 1886.

SIR: In compliance with yours requesting the report of the operations of this office for the year ending June 30, 1886, I have the honor most respectfully to report as follows:

THE CAPITOL.

By direction of the Committee on Rules of the Senate, several changes have been made in the occupation of rooms, which has caused considerable expenditure to accomplish, such as the removal of the places of public convenience in the basement story to inner rooms, and fitting up the rooms thus vacated for committee-rooms; also moving the document-room and shelving the new rooms for the same, in order to add the room formerly occupied by the superintendent of the folding-room to that of the Senate Committee on Foreign Affairs.

Various rooms and some passages have been shelved in the Senate cellar for the storage of documents and the files from the room of the official reporter.

By direction of the Speaker of the House of Representatives, several rooms in the old portion of the building heretofore used as store-rooms for the books connected with the Library, and for other storage purposes, have been prepared for and are now occupied as committee-rooms.

A skylight has been placed in the ceiling of the room of the House Committee on Commerce, the ceiling decorated and walls painted; and numerous changes and improvements accomplished throughout the building, which is now in an excellent condition of repair.

The whole interior of the dome has been painted, and such portions of the exterior as urgently required attention.

The cleaning of the exterior marble work has been continued.

The condition and working of the heating and ventilating apparatus of the Senate is reported by Mr. Jones, the engineer, to be in a reasonably satisfactory condition. He says:

The necessary repairs to the boilers to insure their service during the last long and trying session of Congress, as pointed out by Chief Engineer John Lowe, have been carried out, involving almost the entire renewal of the fire-boxes of the four larger ones, at an expenditure quite disproportionate to the actual value of the boilers.

Quoting from Engineer Lowe's report, he says: "After all this shall have been done they will be fit for their usual service for a period of about three years." And I must

still repeat that after all this has been done, owing to their peculiar plan of construction and somewhat to location, they can never be made to do the work required with efficiency and economy, but at present they are apparently in better condition and certainly more efficient than ever before, and with the additional room and boilers to be put in will probably do all the work required for some years to come, unless it should be deemed advisable to replace a portion of them with those of a more modern and economical type, leaving room for electric-lighting machinery, engines, dynamos, &c.

In the main air nptake leading to the Senate Chamber there has been a material change made by cutting through the walls so as to allow of a much better tempering of the air before it reaches the Chamber. This work has accomplished all that was expected of it, allowing the temperature to be carried with much greater ease and regularity than was formerly the case, thereby enabling the average variation of temperature to be kept within one degree and doing away with the use of burning gas in the air-duct leading to the rooms above. When the enlargement of the air-duct leading to the outside of the building, now in progress, shall be finished, with the proper tower opening out into the grounds at a distance from the building, there will be one great source of discomfort effectually removed.

Since the last report we have taken out of the large Senate steam coil one hundred and ten leaky pipes and replaced the same with new ones, using many special fittings made for that purpose, besides making material changes in the drainage of the same. The other coils are in fair condition.

The engines and pumps are in good condition, having done their work well, requiring no more than such casual repairs as might naturally be expected.

The elevators have caused no material expense, but now call for a certain amount of work to be done upon them to insure their satisfactory working in the future.

Of the condition and working of the heating and ventilating apparatus of the House of Representatives Mr. Lannan, the engineer, says in his report that—

No important changes have been made in the apparatus during the past year, except replacing the steel shaft of engine No.2, broken last session after a service of about seven months. This was replaced by one of hammered iron.

All the engines, fans, and coils are in good condition. The steam-pump used in supplying the House wing with water, after a continuous service of eight years, will require new pistons and rods.

The fire-boxes of the four old boilers now in use have given considerable trouble during the past winter, and will require a number of patches upon their side sheets to make them serviceable for the coming session of Congress. It will be but a short time before the entire fire-boxes must be renewed.

These boilers have been in use for the past twenty-nine years; they are of a pattern now obsolete, and the advisability of supplying their places with others of modern construction at an early day is an apparent necessity. It is estimated that the cost of thoroughly repairing the old would be at least 50 per cent. of the expense of new boilers.

I submit the following important averages taken from daily observations :

Revolutions of fan.....	per minute..	52
Volume of air carried to Hall each revolution.....	cubic feet..	858
Volume of air carried to Hall per minute.....	do....	44,616
Volume of air carried to Hall per minute for each person.....	do....	63
Volume of air removed from Hall per minute for each person, through louvers in roof.....	cubic feet..	58
Average relative humidity.....	per cent..	48
Average daily attendance (about).....		656

Of the electric lighting apparatus, Mr. Talcott, the electrician of the House, reports that the gas-governors which were placed in the loft to regulate the supply of gas to the burners over the ceilings of the Hall have proven satisfactory.

Some attempts have been made, at the expense of the respective companies, to exhibit the working of their electric lighting plants, and that method has been found desirable, particularly in the cloak-rooms and the inner rooms, where formerly gas was used during the day.

THE TERRACES AND GROUNDS.

The north terrace, section A, has been completed, with the exception of the bronze lamps and vases which are to be placed upon the pedestals of the balustrade. The vaults connected with this portion are occupied for storage for books, fuel, and for work-shops.

Satisfactory progress has been made in the construction of the south terrace and the other portions which have been authorized by law.

It is very desirable that the central portion, including the grand stairways, should be built contemporaneously, in order to insure the use of similar material as to shade and quality, as the stairways and central sections are substantially one work, concerning which there should be greater uniformity in the material than perhaps necessary in some other portions of the work. To this end an estimate will be submitted for the next fiscal year for a sum sufficient for the building of these stairways and the connecting sections of terrace, with the hope that in case Congress should not appropriate the entire amount it will at least give authority to procure the labor and material necessary to the completion of these stairways and connections, the construction of which may be proceeded with as Congress makes appropriation therefor.

Of the improvements above mentioned, and that of the Capitol Grounds, Mr. Frederick Law Olmsted, Landscape Architect, in his report, says:

During the last year the terrace has been completed all along the north end of the Capitol, and well advanced along the south end, and most of the Senate's wing. The ground between the Senate wing and the walk to the north of it has been remodeled in adaptation to the terrace.

Bronze lamps have been placed on the piers of the Maryland avenue entrance; thinning of the new plantations has been begun; the last of the decaying trees of the old avenue from Pennsylvania avenue entrance have been removed, and a skirting of low shrubbery has been planted at the base of the north terrace. The growth of the plantations has been satisfactory.

At the next session of Congress it is desirable that provision should be made for a proper inlet to the air-duct for the Senate wing. For this purpose a tower is advised to be built corresponding in situation, construction, and style with that of the ventilating apparatus of the south end of the Capitol. It is recommended that both towers be capped with iron grilles as originally designed.

A large part of the wheelways of the Capitol grounds were provided with a concrete surface before the present excellent method of concreting the streets of Washington had been introduced.

This surface is now giving out, and no patching will long prevent it from becoming a nuisance. As the Congress of 1886-'87 is not to sit after the 4th of March, provision should be made for the laying of a new concrete surface during the long recess of the following summer. As the situation is a particularly trying one, because of the breadth of unbroken surface in parts, the steepness of grade and severity of exposure in other parts, and the unusual variations of temperature to which it is subject, the work should be the best obtainable.

In anticipation of the building of the National Library tentative plans have been prepared to aid a determination of its position within the site fixed by Congress, with care to keep important lines of view open, present both the Library and the Capitol to advantage, secure convenient approaches and connections by walks and wheelways between the two, and while enlarging the Capitol grounds to include the Library, to preserve as far as practicable the advantages thus far acquired by the expenditure made upon it.

COURT-HOUSE, DISTRICT OF COLUMBIA.

All the wood-work of the new portion of the building has been painted, a new well sunk in the western fuel cellar for more effectual drainage, and the heating apparatus put in good condition for the coming winter, and the whole interior of the building put in good repair.

BOTANIC GARDENS.

At this place an asphaltic concrete walk has been laid from the First street entrance to that of Maryland avenue, and some considerable repairs and extensions made to the concrete roadways.

The exterior of the conservatory has been painted, and a large amount of reglazing done to the same.

The various propagating houses have been reglazed and painted to some extent, wooden supports for the slate benches of the east wing of the conservatory have been replaced by iron supports, and the heating apparatus of all the houses has been placed in condition to serve during the next winter, except that of the camelia house, where a new boiler is to be set before cold weather.

Lamps have been placed around the basin of the Bartholdi fountain; the border and a portion of the west lawn have been filled up to grade.

Statement showing the amount expended from June 30, 1885, to June 30, 1886.

CAPITOL EXTENSION.

Amount paid for pay-rolls laborers and mechanics	\$27,639 63
Amount paid for labor paid by voucher	313 11
Amount paid for fresco painter	753 20
Amount paid for paints, oils, and glass	1,235 26
Amount paid for material, plumbing, and steam-fitting	1,268 08
Amount paid for hardware and iron	1,360 94
Amount paid for freight, hauling, and expressage	194 87
Amount paid for cleaning and repairing clocks	100 00
Amount paid for forage	78 65
Amount paid for stationery, books, and drawing material	53 47
Amount paid for silver, nickel plating, and brass-work	223 01
Amount paid for miscellaneous	392 35
Amount paid for brick, cement, lime, and sand	191 60
Amount paid for grate bars, fire-brick, &c.	2,207 92
Amount paid for brushes, sponges, and soap	425 11
Amount paid for marble slabs and tiling	268 53
Amount paid for transoms and screens	111 00
Amount paid for coal for workshops	32 10
Amount paid for material for covering fly-doors	334 69
Amount paid for lumber	664 28
Amount paid for Senate restaurant kitchen	125 00
Amount paid for ropes and blocking	27 50
	<hr/>
	38,000 00
Amount appropriated March 3, 1885	38,000 00

CAPITOL GROUNDS.

Amount paid for pay-rolls laborers and mechanics	\$23,927 45
Amount paid for labor paid by voucher	412 19
Amount paid for lumber	27 90
Amount paid for tools and hardware	168 51
Amount paid for marble, granite, and bluestone	129 50
Amount paid for artificial-stone pavement	4,410 78
Amount paid for painting material	215 24
Amount paid for soil fertilizer, &c.	257 01
Amount paid for trees, shrubs, and plants	413 00
Amount paid for iron castings	366 54
Amount paid for forage	144 00
Amount paid for agricultural implements and seed	334 00
Amount paid for hand-cart	45 00
Amount paid for asphaltic concrete pavement	1,569 54
Amount paid for landscape architect	760 20
Amount paid for fuel	34 37

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Amount paid for brick, lime, sand, and cement.....	\$50 00
Amount paid for transportation, trees, &c	124 34
Amount paid for bronze lamps.....	1,050 00
	<hr/>
	34,439 57
Balance unexpended	560 43
	<hr/>
	35,000 00
Amount appropriated March 3, 1885	35,000 00

CAPITOL TERRACES.

Amount paid for pay-rolls laborers and mechanics.....	\$46,235 49
Amount paid for labor, paid by voucher.....	593 17
Amount paid for plumbing material and drain and water pipes	1,246 06
Amount paid for hardware, rope, and tools.....	418 80
Amount paid for hauling and freight	218 25
Amount paid for lime, sand, and cement.....	4,050 38
Amount paid for foundation stone	3,413 71
Amount paid for bricks.....	5,008 75
Amount paid for iron beams and plates	2,761 06
Amount paid for stationery and drawing-paper.....	68 97
Amount paid for vault lights	2,140 00
Amount paid for advertising.....	51 16
Amount paid for asphaltum.....	65 25
Amount paid for marble and granite work.....	71,151 46
Amount paid for artificial stone pavement.....	32 47
Amount paid for well-digging for foundations	2,534 14
Amount paid for fuel.....	88 13
Amount paid for laying Seneca flag and gutters.....	721 60
Amount paid for granolithic pavement.....	1,209 50
Amount paid for lumber	1,215 03
Amount paid for draughtsman.....	240 00
Amount unexpended	56,536 62
	<hr/>
	200,000 00
Amount appropriated March 3, 1885	200,000 00

LIGHTING UNITED STATES CAPITOL AND GROUNDS.

Amount paid for gas service.....	\$16,737 15
Amount paid for superintendent of meters and lamp-lighters.....	1,475 90
Amount paid for electric lighting.....	576 00
Amount paid for material for electric lighting.....	147 14
Amount paid for chandeliers and gas-fixtures	483 41
Amount paid for gas-governors and piping.....	520 00
Amount paid for lanterns.....	60 00
	<hr/>
	20,000 00
Appropriated March 3, 1885	20,000 00

Most respectfully submitted.

EDWARD CLARK,
Architect United States Capitol.

Hon. L. Q. C. LAMAR,
Secretary of the Interior.

REPORT ON THE CONSTRUCTION OF THE NEW PENSION BUILDING.

OFFICE OF SUPERVISING ENGINEER AND ARCHITECT,
NEW PENSION BUILDING,
Washington, D. C., September 22, 1886.

SIR: At the date of the last annual report of this office, 18th September, 1885, the office rooms were all under roof; the two ends of the great hall were also covered, although a part of the tin roof covering had not been completed. Five of the main iron trusses of the roof of the middle hall, 151½ feet high, were in place. This hall had not been floored, but on parts of the galleries temporary wooden floors had then been laid down. The office rooms in the first and second stories and in one-fourth part of the third story had been plastered and floored with wood, and plastering and flooring in another section of the third story was in progress. None of the interior of the great hall had been plastered. The masonry of the north and south gables of the great hall was not completed. The balance of appropriation then available was \$69,240.87.

During the fall and winter the roof and the masonry were completed. The windows of the clere-story or superstructure, lighting the hall were glazed and the building entirely inclosed. It had been occupied from May 13, 1885, by part of the officers and clerks of the Pension Bureau, and the whole force and its clerks and furniture were gradually transferred during the year 1885 to the new building as rooms were completed and made ready for occupation. The heating apparatus was kept at work in the rooms in which the plaster was fresh, and the walls, under its influence, dried out rapidly, and no inconvenience or ill health, at first apprehended, seems to have been caused by the dampness of the walls.*

On the 30th November, 1885, the funds available having been exhausted, work was suspended. Congress at its late session, by law approved 5th August, 1886, granted an appropriation of \$89,000 for plastering and flooring with tiles the great hall and for completing the building; and also appropriated \$61,000 for extending the fourth floor throughout the building in order to increase the area of floors for office purposes and provide record rooms on the fourth floor for the great and constantly accumulating mass of papers which now occupy rooms which should be reserved for clerical work and the general business of the bureau.

Advertisements and specifications were printed, copies of which accompany this report; and contracts have been awarded for the completion of the building and the extension of the fourth floor. Work was commenced on 9th August, in order to save time, upon the plastering of the great hall, and by the time, prescribed conditions of advertisement and making contracts were completed, all the walls and arches under the arcade of the lower gallery, 20 feet high and 12 feet wide, around the ground floor of the building had received one coat of plaster, parts had been second coated, and the plastering of walls and ceiling of the eastern gallery, 116 feet in length, had been finished. Upon execution of the contract for plastering, this work was turned over for completion to the contractor.

Some progress has been made in the new work. In all the rooms in the cellar permanent floors of masonry have been laid. The brick work

* Time lost by sickness in old quarters during fiscal year of 1884-'85, 18,736 days; time lost by sickness in new building during the fiscal year of 1885-'86, ending June 30, 1886, 10,114 days; saving in time, 8,622 days. This is equal to 23½ years of sickness for one person.

of the walls to support the new fourth floor has been commenced in about one-half of the third story. About half of the work of plastering the lower gallery of the hall, or about 432 feet of its length, is now done. The material for the floor of the great hall and the galleries therein is being prepared, and brick masons are at work completing the upper flights of north and south staircases left unfinished when operations ceased last winter. The total cubic contents of the building are 8,211,491 cubic feet.

The floor space after the fourth floor is completed will be 188,258 square feet.

The law of August 7, 1882, appropriated for Pension building.....	\$250,000 00
The law of March 3, 1883, appropriated for Pension building.....	150,000 00
The law of March 3, 1883, appropriated for heating apparatus	40,000 00
The law of July 7, 1884, appropriated for the building.....	266,559 62
The law of March 3, 1885, appropriated for the building.....	30,000 00
The law of March 3, 1885, appropriated for its gas-pipes.....	11,000 00
The law of August 5, 1886, appropriated for completing building.....	89,000 00
The law of August 5, 1886, appropriated for extending fourth floor.....	61,000 00

Total appropriations	897,559 62
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Total amount expended to September 16, 1885, date of last annual report:

For construction of building	\$654,876 79
For heating apparatus	19,815 38
For gas-pipes	3,626 58

Total expended	678,318 75
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Total amount expended from September 16, 1885, to September 20, 1886:

For construction of building.....	\$49,143 25
Heating apparatus	19,372 59
Gas-pipes	69 37
Extending gallery and fourth floor.....	197 40
	68,782 61

Total amount expended to September 20, 1886.....	747,101 36
--	------------

Balance available:

From appropriation for construction of building.....	\$81,539 58
From appropriation for heating apparatus.....	812 03
From appropriation for gas-pipes.....	7,304 05
From appropriation for gallery and extending fourth floor.....	60,802 60

Total amount remaining available for all purposes	150,458 26
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I remain, very respectfully, your obedient servant,

M. C. MEIGS,
Supervising Engineer and Architect New Pension Building.

REPORT OF THE BOARD OF VISITORS OF THE GOVERNMENT HOSPITAL FOR THE INSANE.

GOVERNMENT HOSPITAL FOR THE INSANE,
Washington, D. C., October 1, 1886.

SIR: The Board of Visitors of the Government Hospital for the Insane respectfully submit this their thirty-first annual report. Attention is called to the following tables, which give the results of the year's work, with the changes in the population of the hospital, during the year ending June 30, 1886.

SUMMARY.

	Males.	Females.	Total.
Remaining June 30, 1885	926	296	1,222
Admitted during the year ending June 30, 1886	234	69	293
Whole number under treatment	1,160	364	1,524
DISCHARGED.			
Recovered	55	22	77
Improved	58	15	73
Unimproved	2	3	5
Died	70	23	93
Total discharged and died	184	63	247
Remaining June 30, 1886	966	301	1,267

Admissions and discharges.

	Males.		Females.		Totals.	
REMAINING JUNE 30, 1885.						
Army.....	{ White... 500 Colored.. 9	578	8	3	581	
Navy	{ White... 61 Colored..					
Marine Hospital Service.....	{ White... 12 Colored.. 8	61			61	
Civil life.....	{ White... 191 Colored.. 81	15	212 80		15	
		272	292		564	
		926		293		1,219
ADMITTED DURING THE YEAR 1885-'86.						
Army.....	{ White... 134 Colored.. 2	136			136	
Navy	{ White... 8 Colored.. 1					
Marine Hospital Service.....	{ White... 8 Colored.. 1	9			9	
Civil life.....	{ White... 58 Colored.. 27	4	50 19		4	
		85	69		154	
		234		69		303
UNDER TREATMENT DURING THE YEAR.						
Army.....	{ White... 703 Colored.. 11	714	3		717	
Navy	{ White... 60 Colored.. 1					
Marine Hospital Service.....	{ White... 15 Colored.. 4	70			70	
Civil life.....	{ White... 249 Colored.. 108	19	263 99		19	
		357	361		718	
		1,160		364		1,524
DISCHARGED DURING THE YEAR—Recovered.						
Army.....	{ White... 24 Colored.. 1	25			25	
Navy	{ White... 4 Colored..					
Civil life.....	{ White... 19 Colored.. 7	4	18 4		4	
		26	22		48	
		55		22		77

Admissions and discharges—Continued.

		Males.		Females.		Totals.	
CHARGED DURING THE YEAR—Improved.							
	{ White . . .	38					
	{ Colored..		38				38
	{ White . . .	4					4
	{ Colored..		4				4
B.....	{ White . . .	10		10			10
	{ Colored..	6	16	5	15	16	31
				58			73
CHARGED DURING THE YEAR—Unimproved.							
S.....	{ White . . .	2		3			5
	{ Colored..		2	1			3
					3		5
DECEASED DURING THE YEAR.							
	{ White . . .	40					40
	{ Colored..	1	50				51
	{ White . . .	3					3
	{ Colored..		5				5
Hospital Service.....	{ White . . .	1					1
	{ Colored..		1				1
B.....	{ White . . .	15		16			31
	{ Colored..	8	23	7	23	23	46
				70			102
REMAINING JUNE 30, 1886.							
	{ White . . .	502		3			505
	{ Colored..	9	601		3		613
	{ White . . .	50					50
	{ Colored..	1	57				58
Hospital Service.....	{ White . . .	14					14
	{ Colored..	4	18				22
to.....	{ White . . .	203		216			419
	{ Colored..	87	290	83	206	301	1,267

Monthly changes of population.

Date.	Admitted.			Discharged.						
	Males.	Females.	Total.	Males.	Females.	Total.	Died.			Total discharges, including deaths.
							Males.	Females.	Total.	
1885.....	19	2	21	13	9	22	13	4	17	39
1st, 1885.....	16	16	32	7	1	8	6	4	10	16
2nd, 1885.....	15	1	16	10	2	12	3	2	5	17
3rd, 1885.....	10	8	27	14	4	18	1	2	3	21
4th, 1885.....	7	5	12	3	3	6	1	2	3	9
5th, 1885.....	43	5	47	6	5	11	7	3	10	31
6th, 1885.....	19	7	26	8	5	13	10	1	11	24
7th, 1885.....	6	6	12	11	3	14	4	1	5	19
8th, 1885.....	20	8	28	7	2	9	11	2	13	20
9th, 1885.....	12	6	18	11	2	13	6	1	7	23
10th, 1885.....	11	5	16	4	3	7	10	1	11	18
11th, 1885.....	46	6	52	21	3	24	5		5	29
Total.....	234	69	303	115	40	155	79	23	102	257

The patients from civil life remaining June 30, 1886, are classified as follows:

	Males.	Females	Total
District of Columbia, transient	37	17	54
District of Columbia, resident indigent	224	274	498
District of Columbia, convicts and criminals	12	1	13
United States convicts and criminals	13	1	14
Private patients	4	5	9
Total	290	298	588

Physical condition of those who died.

Apoplexy	1	Cancer of stomach	1
Apoplexy, epileptic	1	Ulceration of stomach	1
Apoplexy, hæmorrhagic	4	Leucocythæmia	1
Apoplexy, serous	5	Pleuritis	1
Bright's disease of kidneys	2	Hydrothorax, pleuritic	1
Uræmia	1	Epileptiform convulsions	5
Congestion of lungs	2	Peritonitis	4
Diarrhœa	4	Acute bronchitis	1
Exhaustion and inanition	7	Gastric catarrh	1
Organic disease of brain	7	Acute gastritis	1
Organic disease of heart	4	Renal tuberculosis	1
Paralysis, bulbar	4	Typhoid fever	1
Paresis	6	Enteritis with diarrhœa	1
Phthisis pulmonalis	24	Typho-malarial fever with cystitis ..	1
Hæmoptysis	1	Convulsions from meningitis	1
Pneumonia	1	Chronic parenchymatous nephritis	
Pneumonia, catarrhal	1	with aortic valvular disease	1
Rupture of mesenteric artery	1		
Senectus	3	Total	102

Duration of the mental disease, on admission, of those who recovered.

Under 10 days	11	Between 4 and 5 years	2
Between 10 and 20 days	9	Between 5 and 6 years	1
Between 20 and 30 days	1	Between 6 and 7 years	1
Between 1 and 2 months	17	Between 8 and 9 years	1
Between 2 and 3 months	4	Between 12 and 13 years	1
Between 3 and 4 months	3	Between 20 and 25 years	1
Between 4 and 5 months	3	Unknown	2
Between 6 and 8 months	12		
Between 1 and 2 years	5	Total	7
Between 2 and 3 years	3		

Duration of the mental disease of those who died.

Less than 1 month	1	Eight years	2
One month	2	Ten years	5
Two months	1	Eleven years	8
Three months	1	Twelve years	2
Five months	1	Thirteen years	4
Six months	2	Fifteen years	1
Seven months	2	Seventeen years	1
Eight months	3	Nineteen years	1
Nine months	1	Twenty years	1
Eleven months	1	Twenty-four years	1
One year	17	Twenty-five years	3
Two years	7	Twenty-six years	1
Three years	13	Twenty-seven years	1
Four years	6	Thirty-six years	1
Five years	6	Unknown	1
Six years	3		
Seven years	2	Total	102

Duration of disease on admission.

		Males.			Females.			Totals.						
LESS THAN SIX MONTHS.														
Army.....	{ White ...	36	37	80		27	27	37	107					
	{ Colored ..	1												
Navy.....	{ White ...	6	7					7						
	{ Colored ..	1												
Marine Hospital Service.....	{ White ...		1					1						
	{ Colored ..	1												
Civil life.....	{ White ...	23	35		20		62							
	{ Colored ..	12			7									
LESS THAN ONE YEAR.														
Army.....	{ White ...	8	8	14		8	8	8	22					
	{ Colored ..													
Navy.....	{ White ...		1					1						
	{ Colored ..													
Marine Hospital Service.....	{ White ...	1	5					13						
	{ Colored ..													
Civil life.....	{ White ...	2	5		4		13							
	{ Colored ..	3			4									
ONE TO TWO YEARS.														
Army.....	{ White ...	26	26	37		8	8	26	45					
	{ Colored ..													
Navy.....	{ White ...		2					2						
	{ Colored ..													
Marine Hospital Service.....	{ White ...	2	9					17						
	{ Colored ..													
Civil life.....	{ White ...	8	9		6		17							
	{ Colored ..	1			2									
OVER TWO YEARS.														
Army.....	{ White ...	15	15	23		10	10	15	33					
	{ Colored ..													
Navy.....	{ White ...		1					1						
	{ Colored ..													
Marine Hospital Service.....	{ White ...		8					18						
	{ Colored ..													
Civil life.....	{ White ...	5	8		10		18							
	{ Colored ..	3												
OVER THREE YEARS.														
Army.....	{ White ...	9	9	15				9	15					
	{ Colored ..													
Navy.....	{ White ...	1	1					1						
	{ Colored ..													
Marine Hospital Service.....	{ White ...		5					5						
	{ Colored ..													
Civil life.....	{ White ...	5	5					5						
	{ Colored ..													

Duration of disease on admission—Continued.

		Males.			Females.			Totals	
. OVER FOUR YEARS.									
Army.....	{ White ...	2							
	{ Colored ..	1							
			3					3	
Navy	{ White ...								
	{ Colored ..								
Marine Hospital Service	{ White ...								
	{ Colored ..								
Civil life	{ White ...	8			1				
	{ Colored ..								
			3			1		4	
				6			1		1
FIVE TO TEN YEARS.									
Army.....	{ White ...	23							
	{ Colored ..								
			23					23	
Navy	{ White ...								
	{ Colored ..								
Marine Hospital Service	{ White ...								
	{ Colored ..								
Civil life	{ White ...	7			3				
	{ Colored ..	3			1				
			10			4		14	
				33			4		1
TEN TO TWENTY YEARS.									
Army.....	{ White ...	13							
	{ Colored ..								
			13					13	
Navy	{ White ...								
	{ Colored ..								
Marine Hospital Service	{ White ...								
	{ Colored ..								
Civil life	{ White ...	1			4				
	{ Colored ..	4							
			5			4		9	
				18			4		:
OVER TWENTY YEARS.									
Army.....	{ White ...	2							
	{ Colored ..								
			2					2	
Navy	{ White ...	1							
	{ Colored ..								
			1					1	
Marine Hospital Service	{ White ...								
	{ Colored ..								
Civil life	{ White ...	2			1			4	
	{ Colored ..	1							
			3						
				6			1		
UNKNOWN.									
Army.....	{ White ...	1							
	{ Colored ..								
			1					1	
Navy	{ White ...								
	{ Colored ..								
Marine Hospital Service	{ White ...								
	{ Colored ..								
Civil life	{ White ...				2				
	{ Colored ..				5				
				1		7		7	

Table showing the nativity, as far as could be ascertained, of the 6,645 cases treated.

Native born.		Foreign born.	
	Number.		Number.
District of Columbia	754	Ireland	1,301
New York	476	Germany	852
Maryland	488	England	150
Virginia	530	France	61
Pennsylvania	362	Canada	57
Ohio	199	Scotland	57
Massachusetts	147	Switzerland	24
Maine	73	Italy	24
Illinois	62	Denmark	15
Connecticut	55	Norway	12
New Hampshire	57	Sweden	22
Indiana	54	Poland	13
Kentucky	47	Russia	11
Michigan	37	Austria	11
New Jersey	50	Nova Scotia	9
Tennessee	29	Spain	4
Wisconsin	24	Holland	8
Vermont	33	Wales	5
Missouri	34	Portugal	4
Rhode Island	19	Hungary	4
Delaware	14	Mexico	4
North Carolina	24	Saxony	5
Alabama	11	Malta	3
South Carolina	15	Belgium	3
Iowa	6	Buenos Ayres	1
Georgia	16	Costa Rica	1
Mississippi	17	Bavaria	4
Louisiana	9	Sicily	1
West Virginia	14	British Columbia	1
Kansas	2	British possessions	1
Florida	3	East Indies (British)	3
Texas	8	West Indies (British)	6
California	3	New Brunswick	1
Indian Territory	4	Cuba	2
Colorado	1	China	1
Arkansas	2	Sandwich Islands	1
Montana	1	Coast of Africa	1
Oregon	1	Cyprus	1
Minnesota	1	Turkey	1
		Greece	1
		New Granada	1
		West Indies (Hayti)	1
Total	3,688	Total	2,688

Native born	3,688
Foreign born	2,688
Unknown	269
Total	6,645

Form of disease in those admitted.

Disease.	Total last year.	Admitted during year.	Total.	Disease.	Total last year.	Admitted during year.	Total.
Mania, acute	2,116	60	2,176	Kleptomania	4		4
Mania, chronic	1,083	66	1,149	Nymphomania	3	1	4
Melancholia	818	62	880	Imbecility	67	6	73
Dementia	1,573	72	1,645	Opium-eaters	16		16
Dementia, senile	111	15	126	Not insane	10		10
Paresis	119	15	134				
Dipsomania	420	6	426	Total	6,342	303	6,645
Typhomania (Bell's disease)	2		2				

Tabular statement of the time of life at which the 6,645 cases treated since the opening of the institution became insane.

Age.	1885.	Admitted.	1886.
Under 10 years.....	117	9	12
Between 10 and 15 years.....	66	5	7
15 and 20 years.....	375	10	26
20 and 25 years.....	1,059	27	1,068
25 and 30 years.....	1,204	44	1,268
30 and 35 years.....	1,043	31	1,074
35 and 40 years.....	759	37	796
40 and 45 years.....	516	38	554
45 and 50 years.....	358	24	382
50 and 60 years.....	380	34	414
60 and 70 years.....	221	22	243
70 and 80 years.....	73	8	81
80 and 90 years.....	9	8	17
Over 90 years.....	1	.....	1
Unknown.....	151	8	159
Not insane.....	10	.....	10
Total.....	6,342	303	6,645

As far as could be ascertained, the volunteers of the Army and Navy under treatment during the year ending June 30, 1886, entered the service from the following States:

States.	Army.	Navy.	Total.	States.	Army.	Navy.	Total.
New York.....	65	.....	65	Nebraska.....	1	.....	1
Ohio.....	63	.....	63	Delaware.....	1	.....	1
Pennsylvania.....	53	.....	53	Minnesota.....	3	.....	3
Indiana.....	82	.....	82	Iowa.....	4	.....	4
Michigan.....	19	.....	19	North Carolina.....	1	.....	1
Illinois.....	24	.....	24	New Mexico.....	1	.....	1
Wisconsin.....	12	.....	12	Kentucky.....	3	.....	3
Missouri.....	13	.....	13	Louisiana.....	2	.....	2
Connecticut.....	10	.....	10	West Virginia.....	3	.....	3
New Hampshire.....	6	.....	6	Rhode Island.....	.....	.....	.....
Vermont.....	3	.....	3	District of Columbia.....	.....	.....	.....
Maryland.....	11	.....	11	Colorado.....	1	.....	1
Massachusetts.....	28	.....	28	Unknown.....	10	2	12
New Jersey.....	6	.....	6	Total.....	383	3	386
Maine.....	8	1	9				

Private patients.

	Males.	Females.	Total.
There were at the beginning of the year.....	4	6	10
Admitted during the year.....	.....	.....	.....
Whole number under treatment.....	4	6	10
Discharged during the year.....	.....	1	1
Remaining at end of year.....	4	5	9

Summary of total admissions.

	Male.	Female.	Both sexes.
Percentages of cases recovered.....	41.65	27.99	39.61
Percentages of cases improved.....	14.09	17.42	14.73
Percentages of cases unimproved.....	2.41	5.05	2.82
Percentages of cases died.....	23.83	26.13	24.97
Percentages of cases remaining.....	18.02	23.41	19.67
	100.00	100.00	100.00

The whole number of the insane under treatment during the year was 1,524, the daily average being 1,219.62. The number of admissions was 303, that of discharges including deaths 257, leaving a total of 1,267 remaining in the hospital at the close of the fiscal year 1886.

The number reported recovered was 77, thirty per cent. nearly of the discharges and deaths. The number of deaths was 102, being six and two-thirds per cent. nearly of the whole number under treatment. Taking into account the advanced age and chronic character of the disease in so large a proportion of the inmates when admitted, the percentage of recoveries and deaths are both favorable. A very considerable number of the admissions each year are from the Home for Disabled Volunteer Soldiers. As more than twenty-one years have passed since the close of the war which called forth these soldiers, the majority of them have already passed middle life; hence there is a lessened prospect of recovery and a greater certainty of a considerable per cent. of deaths. With such necessary limitations we can hardly hope for a brilliant showing in statistics. None the less is the care required, and the result praiseworthy.

* * * * *

What has been the year's record in the matter of the "enlightened care of the insane"? A very large majority of those who come under treatment in this hospital are of the chronic class, and whatever may be exceptionally true of the need of rest and the avoidance of all mental application in some acute and, rarely, some recurrent, cases, the fact remains that with our inmates the best road to quiet content, if not to cure, lies through the regular occupation of body and mind with some work not too hard of comprehension, nor too taxing to the strength in its performance.

How difficult it is to compass this, only those who have undertaken it know. With the most favorable conditions, the proportion of hopelessly idle, vacant life in a hospital for the insane is so large as to be almost disheartening. Recognizing all this, we do not attempt the impossible but work with such materials as we have. Whoever in a hospital undertakes in earnest to do all that he can, with labor as the most efficient instrumentality in the treatment and management of the insane, will soon leave the element of profit and loss entirely out of the account. The money value of their work is inconsiderable, but contentment, which is "better than riches," is certainly promoted by it. The number who can work at any skilled labor the knowledge of which was not acquired previous to the insanity is small. As a rule, even those familiar with a trade before, if put to work at it, produce but indifferent results. It is generally possible to see in their work traces of the mental defect which has dulled the fine edge of apprehension; their cabinet work looks clumsy, lines are out of true; shoes are but imperfectly lasted, certainly not made to last; the artist tinges his painting with something from the nightmare world he works in. Women in hospitals made "crazy quilts" long before the modern craze in that direction. Of their productions nothing is perfect. "The trail of the serpent is over them all." A glass-cutter, under care in this hospital, engraved a decanter exquisitely, and then put "State Department" in the center of the piece. Here the mind was printing from a negative left in the brain-cells from some former work.

Skilled labor, unless in exceptional cases of former excellence, is not suitable work for the insane. In this climate, work on the land and about the grounds is, for the men, by far the most satisfactory employ-

ment which has been found, although with the new shop now completing, facilities will be afforded for the satisfactory trial of some new forms of occupation hitherto unattempted with us. During the past year three male attendants have been employed exclusively in looking out patients of different classes and working with them on the grounds. This has included one group from the ward of the most violent cases. These working parties are employed in mending roads, excavating, building, raking the lawns, and digging in the vineyard. In the female department an attendant has been assigned to take a party of the colored women each day to the laundry, working with them there. The result has been so satisfactory that the number of these working parties will be increased. A lunch served at their work is the inducement that we have been able to offer, and this is not without its effect, showing that the gustatory nerve is a direct avenue of appeal to the insane mind. A lawn sewing party, meeting in a cross section of one of the wards on inclement days, has been in very successful operation, rather eclipsing in their work that of the regular sewing-room, the class of patients being too excitable for that apartment. A third set, meeting in one of the parlors, have busied themselves with light sewing and fancy work. It is safe to say that at no time hitherto has a larger proportion of the female patients been employed at some useful occupation than now. A primary school has lately been opened in the female department, which promises good results, though as yet there are but a limited number of scholarships. The band of instrumental music, on the other hand, has thus far failed of success. More or less musicians are sent here from the Army, but, as a rule, their music is gone; evil spirits get into their horns, and the notes they sound are "out of tune and harsh." Still, other hospitals have organized successful orchestras, and we shall not despair of its accomplishment. Life in the open air at all proper times has been the rule, and we are satisfied that the general health of the household has been benefited thereby. Rides, walks, and sun-baths are prominent modes of treatment at St. Elizabeth.

While the hygiene and moral treatment have thus been made prominent, medical treatment has not been overlooked. Avoiding routine the endeavor has been to prescribe for individual cases according to varying wants and conditions. Some new remedies have been tested. Urethan has proved satisfactory as a hypnotic in certain forms of wakefulness, and the hydrobromate of hyoscyne found a powerful agent in the control of acute excitement, that merits a further trial. Still the old and tried remedies have not been thrown aside. Quinine, iron and strychnine, cod liver oil and the bromides, with or without chloral or opium, are a main reliance. Nor has it been deemed advisable to follow their lead who now discard all stimulants. Alcohol, in some of its forms, finds recognition in the treatment of inflamed and feeble cases and has been thought by the old soldier to be an aid to his digestion. It is certain that old habits in time acquire something of the force of a second nature. So we still issue tobacco to those who have been its victims ever since the war; and when the new dining-hall is completed we hope to have a comfortable room where the aged pensioner can smoke his pipe in peace.

The night medical service has continued to give good satisfaction. Night nurses in the wards of the epileptic and untidy, as well as in the care of the sick, are now regularly employed in both the male and female departments, thus affording a continuous night and day attendance on these classes of the insane.

Valuable work is being done in the pathological department. More than sixty autopsies have been made during the past year, and the observed condition of brain and other organs carefully recorded, microscopic sections prepared and labeled, all making a rich store of valuable data for comparison and study in the future. Photographic work of an interesting character has been attempted in this department, of morbid conditions of the organs found in autopsies; also of typical forms and stages of insanity in the living, which, it is hoped, will in time afford material for the most exhaustive analysis and research in this hitherto but scantily worked field.

The employment of a dentist for the care and preservation of the teeth of the inmates has been a feature of the year's progress, and is noted as an advance in the direction of "the most humane and enlightened care of the insane," as provided for in the organic act establishing the hospital.

The estimates submitted for the fiscal year ending June 30, 1888, are as follows:

For current expenses	\$275,000 00
For general repairs and improvements	15,000 00
For special improvements, viz:	
Additional accommodations for colored insane	17,000 00
Rebuilding wharf at the river	3,500 00
Cottage at the cemetery	900 00
Additional boiler for heating new building	1,500 00
Tower clock	750 00
Furnishing new building for convict insane	5,000 00
Additional land for farming purposes	6,000 00
Total	324,650 00

The estimate for current expenses is for support in the hospital, including clothing, medical and moral treatment, of an estimated average number of 1,250 indigent insane persons of those classes who, under the statutes of the United States, are entitled to treatment. These comprise the insane of the Army and Navy, Marine Corps, Revenue-Cutter Service, National Home for Disabled Volunteer Soldiers, and the indigent insane of the District of Columbia, also United States convicts who are insane. The basis of the estimate is an annual cost of \$220 per capita. It has been a rule to provide for a portion of this expenditure in the District of Columbia bill. Congress at the last session, after carefully considering all the evidence touching the proportion of those sent to the hospital by the District authorities that should properly be estimated for in that bill, fixed the amount for the present fiscal year at \$75,132. The same amount is estimated for the coming year, for while there will be undoubtedly an increased number of admissions from the District, there is a prospect that the removal of some harmless imbeciles, and the somewhat lessened per capita cost as estimated will keep the expenditure for that class within the amount of the present appropriation. Should Congress see fit to include this amount, \$75,132, in the District bill, there will remain the sum of \$199,868 to be provided for in the sundry civil bill. It is asked that not exceeding \$1,500 of this may be used to defray the expenses of the return of patients to their friends, as has been done hitherto.

The sum of \$15,000 is needed for general repairs and improvements. The very considerable number and extent of the buildings requiring care, and the length of time which many of them have now been in constant use, renders it necessary to renew a number of floors and renovate the wards to a somewhat greater extent than has hitherto been attempted. *It is believed that true economy requires the expenditure*

of this sum to prevent deterioration of the buildings and to continue the improvement of the grounds.

The sum of \$17,000 is asked to provide additional accommodations for the colored insane. The number of this class makes it impossible to provide for them in the lodges originally designed for their use. On the 30th of June, 1886, there were 183 of the colored insane of both sexes under treatment here. The utmost capacity of the east and west lodges—buildings especially designed for their use—is for 90 persons. Consequently, fully one-half of the whole number under treatment are quartered in rooms designed for other classes, wherever in our crowded wards lodgings can be found. This is not pleasant to the white patients any more than it is to the colored. In this matter of distinct quarters it is right that the wishes of the colored insane should be gratified, for they cost no more. These can be satisfactorily and most economically afforded at this time by extending the lodges with large associate dormitories adapted to their use. For the sum named, space for 100 beds can be provided.

The wharf at the river is in an unsafe condition and requires to be rebuilt at once. All the fuel of the hospital, amounting to more than 3,000 tons annually, is received at this wharf. A permanent structure of stone will cost but little more than one like the present, and will settle the wharf question for another generation. The sum of \$3,500 will provide for the stone laid in the walls, and the filling with gravel will afford good occupation for the inmates. As the wharf will shortly be needed for the delivery of next year's coal, this appropriation is asked to be immediately available.

There is urgent need for a small but suitable structure at the hospital cemetery for its custodian, looking both to the proper keeping of the grounds and to prevent any desecration of the graves. The graves of soldiers everywhere ask of the Government recognition and care.

A tower clock at some central point of the hospital is much needed. Nothing adds more to the comfort and order of a hospital for the insane than a standard time-keeper, so placed that it can be seen from all quarters. There is a sense of companionship to the inmates in the very striking of the hours.

An additional steam-boiler of one hundred horse-power, similar to those now in use at the boiler-house, is required for warming the new building for the convict and homicidal insane. The estimate for this is \$1,500.

The sum of \$5,000 is asked for furnishing the new building when ready for occupancy. This is intended to include bedding and furniture; also benches, tables, and other appliances for the work-shops.

The land asked for farming purposes at the last session of Congress is no less needed now than then, nor has real estate fallen in value in the mean time. The request is renewed for \$6,000 for the purchase of an adjacent farm, to enable the hospital to extend its grazing lands. The importance of an abundant milk supply for a population like ours needs no argument. Each added year's experience confirms the conviction that no food of equal value can be substituted for fresh milk with these old and feeble cases. For our herd of nearly two hundred head of neat cattle suitable land within four miles of the United States Capitol can now be purchased for \$125 an acre, land that in a few years cannot be obtained for double the price. Shall we continue to wait?

The hospital has been in receipt during the year of valuable public documents from the Department of the Interior, of several hundred illuminated cards and valentines from the Dead-Letter Office, which

have been distributed among the inmates; also books and illustrated newspapers from thoughtful friends, who will please accept our thanks.

To Professor Sousa and the Marine Band we are again indebted for outdoor concerts during the summer months, that were much enjoyed by our household. Amateur dramatic societies and glee clubs have continued to make our winter evenings less long with their entertainments, and again place us under obligations. Ladies have brought flowers; the parking commission with trees and Colonel Wilson with cuttings have helped to beautify our grounds, and so brighten the sad eyes that look upon them.

We would again renew the invitation to all who have books, magazines, or illustrated papers to give, that they send them to us. Our wagon will call for any such, at any point in the city, if notified to do so.

Rev. J. G. Butler, ever a warm friend of the hospital, and, with a brief interruption, for nearly twenty years its acceptable chaplain, having met a deserved promotion to the chaplaincy of the United States Senate, has been succeeded by Rev. William E. Parson, of the Church of the Reformation.

Rev. Dr. Edwards, whom we have missed from the meetings of the board, it affords us pleasure to welcome back as our chaplain in the place of the Rev. J. O. Hagey, who was called from useful work here to needed rest and honor in the Wesleyan College in Tennessee.

Dr. S. B. Lyon resigns his position here to accept that of assistant superintendent in the Bloomingdale Asylum at New York. It is a fitting promotion. For seventeen years as chief clerk, and later as assistant physician in charge of the female department of this hospital, Dr. Lyon has been with us, and marked ability and faithful service have characterized his labors here. Entering upon the responsible position to which he is called, he will take with him our best wishes for his happiness and success.

The other staff officers remain without change. They are filling their respective positions acceptably, increased experience fitting them for the added responsibilities which the constant growth of the hospital brings.

The daily average number under treatment has been steadily mounting up until during the past year it has been more than 1,200. As the years move on since the war, the number of veteran soldiers breaking down under the infirmities of age and disease will naturally increase, and that beyond the reduction made in their ranks by death, and unless the authorities of the District of Columbia see fit to make provision for some of the chronic and harmless cases at their own asylum, the number in this institution, already one of the largest in the country, must continue to increase. Although a greater number cannot be considered desirable, yet the locality is unsurpassed, the grounds are ample, the buildings can readily be extended to provide for all, and the officers will not shrink from the duty imposed. The nation can well afford a home to those whose health has been sacrificed in its defense, and whatever is shown to be necessary in this direction Congress has always stood ready to provide.

We are, very respectfully, your obedient servants,

J. M. TONER,

President of the Board.

W. W. GODDING,

Secretary ex officio.

Hon. L. Q. C. LAMAR,

Secretary of the Interior.

REPORT OF THE FREEDMEN'S HOSPITAL.

FREEDMEN'S HOSPITAL,
Washington, D. C., September 30, 1886.

SIR: I respectfully submit the annual report of this hospital for the fiscal year ending June 30, 1886.

From the tables presented it will be seen that 2,131 were admitted and cared for during the year, an increase of 111 over last year. Of the whole number treated, 734 were colored males, 694 were colored females, 596 were white males, 107 white females. These figures will give some idea of the general character of the institution, and correct the impression that it is confined to or designed for any special class. The management has bent every effort to make it a desirable place for all the unfortunate sick who may seek admission. These efforts have not been made in vain, as the above figures will show.

During the year there were 206 surgical operations performed. The success attending these operations was all that could be desired. I will mention in this connection the principal ones: Amputation of thigh, 2; of leg, 2; of forearm, 1; of metacarpal bones, 1; of fingers, 17; of toes, 2; removal of fatty tumors, 11; of keloid tumors, 3; of fibroid tumor, 1; of epithelioma, 1; of cancer of breast, 2; paracentesis abdominis, 7; hydrocele, 5; tapping of bladder through rectum, 3; urethrotomy, 1; dilatation of stricture of urethra, 6; of stricture of rectum, 2; for phimosis, 6; ranula, 2; in-growing toe-nail, 2; paronychia, 1; extirpation of tonsil, 2; removal of foreign body from throat, 1; from hand, 3; from foot, 1; from ear, 1; repair of ruptured perinæum, 1; abscesses, 73; setting of fracture of inferior maxillary, 1; of fracture of vertebra, 1; of ribs, 3; of arm, 1; of forearm, 1; of radius, 1; of thigh, 3; of leg, 5; of metacarpal bones, 2; of tibia, 1; of fibula, 1; of compound comminuted fracture of leg, 1; of compound fracture of great toe, 1; reduction of dislocations, 4; gunshot wounds, 20.

During the year there have been 117 cases of confinement, an increase of 25 over last year. As I have reported each year, nearly all of these cases are colored. I deem it my duty, as a simple act of justice, to anticipate any unfavorable comment that may be made against these unfortunates—for such they are. My contact with these people has been such as to enable me to say a good word for them. They are not bad women, not lewd; they belong to the laboring class—are generally house servants, who are ignorant of the laws governing good society. They are without education, and have never been surrounded by a healthy moral influence; they truly “have been taken advantage of.” As a rule they are industrious, and almost invariably provide and care for their children after leaving the hospital. How they manage to support them upon their scanty earnings is a marvel. It is a matter of regret that there is no way of reaching the fathers of these children, and making them contribute to their support.

Tables marked A and B show the causes of death, and the number of deaths in ten days after admission. The table marked C contains a full list of the injuries, surgical cases, and diseases. Table marked D shows the occupations of the patients. The table marked E shows their nativity. The table marked F shows the monthly admissions, and that marked G shows the number admitted each year for the past twelve years. The table marked H shows the number admitted, born, discharged, and died, and the number remaining June 30, 1886.

About 186⁰ ex-soldiers have been admitted and treated. These persons come from all parts of the country to look after claims; many become sick, and, upon the recommendation of the Commissioner of Pensions, are admitted to the hospital. A large percentage of the admissions is upon the recommendation of the police. From this source 795 were admitted. Many apply directly to the hospital for admission; others are recommended by the physicians of the city, by the Associated Charities, and other charitable enterprises. All cases, however, are inspected by the physicians of the hospital, and, if worthy and proper, are admitted.

During the year, upon the recommendation of the secretary of the board of managers of the National Soldiers' Homes, 44 ex-soldiers, who were delayed in the city for a few days, waiting transportation, were received. For these cases a small compensation is paid by the board, sufficient to meet the cost of keeping them. The amount for last year was \$118. Of this \$29.60 have been paid, and the balance will be paid, as usual, December 31.

The sanitary condition of the institution has been good, especially so in view of the fact that many of those admitted are from a class which seems to prefer being unclean. The buildings composing the several wards were erected several years ago, and do not conform to modern ideas as to comfort and convenience. It requires much labor to keep them clean and in perfect repair. The nurses and attendants, as a rule, have had long experience in hospital work, which enables us to keep the institution in its present healthy condition. During the spring the several buildings were painted and renovated. I have been successful in securing an additional appropriation sufficient to permit the erection of two additional bath-rooms and water-closets, to purchase two of the most improved patent metallic washing-machines, and one steam ironer. These improvements were much needed.

The mortality, though less than last year, is still large. This is readily accounted for from the fact that most of the patients admitted are from a class which is continually subjected to the worst hygienic, physical, and moral influences, which is superstitious as to hospitals and availing itself of their advantages until driven into them by necessity. Many come in a dying condition, as indicated by Table B.

Convalescent patients, and those waiting to be confined, are required as far as possible to perform some light service. The men assist in taking care of the grounds, and the women assist in sewing. Most of the clothing used in the hospital is made by the female patients; the mending is done by them. The following articles have been made: Bedsacks, 22; counterpanes, 87; pillow-cases, 184; sheets, 150; towels, 78; shirts, 230; drawers, 159; chemises, 89; dresses, 83; aprons, 120; skirts, 28; handkerchiefs, 36; gowns, 40; pants, 7; caps, 14.

Religious services were held as formerly, three times a week, in the chapel. These exercises are conducted by two theological students from Howard University, who receive their board for their services. They visit the wards daily, write letters for the patients, and perform such other services as may be required of them. Ministers from the city, representing the various denominations, are permitted to visit the hospital at all hours.

We are especially indebted to Rev. Fathers J. A. De Ruyter and C. Hurley, of Saint Augustine Church; Rev. Father P. J. Ryan, of the Immaculate Conception Church; and Rev. Irving McElroy, of the Church of the Epiphany. These gentlemen have been constant visitors, and have rendered valuable services to the sick.

The management and patients are likewise indebted to Mrs. Ada E. Spurgeon, a missionary from the Church of the Epiphany. This lady has served the sick well in various ways, and has been the means of securing homes for quite a number after they had recovered. Ladies of the Christian Union (white) have also shown a deep interest by frequent visits and by distributing flowers.

In the dispensary attached 3,002 persons have been prescribed for. The hours for attending to those who apply at the dispensary for medical attention are from 12 m. to 2 p. m. Medical students from the medical colleges of the city and from the Howard University Medical School, which is located upon the grounds, have availed themselves of the clinical advantages of the hospital and dispensary attached. To the colored students these opportunities for study have been of great advantage. To the students a short apprenticeship is allowed in the dispensary and in the wards, where, under the instruction of the surgeon in charge, they become familiar with medicines and with the art of writing prescriptions and examining patients.

The deportment of the patients, as a rule, has been good. But few have been discharged for misconduct, though we have some from the worst elements of society to contend with.

The increase in the number of patients has imposed additional labor upon the surgeons and attendants. I have asked for an increased appropriation of \$400 to enable me to employ additional nurses.

C. B. PURVIS, M. D.,

Surgeon-in-Chief.

Hon. L. Q. C. LAMAR,

Secretary of the Interior, Washington.

REPORT OF THE PRESIDENT AND DIRECTORS OF THE WASHINGTON HOSPITAL FOR FOUNDLINGS.

WASHINGTON, D. C., November 8, 1886.

SIR: In compliance with your request of the 4th instant we respectfully submit the following:

Since our report of July 1, 1885, our entire assets, exclusive of the real estate for use as a hospital, have been converted into cash.

We were compelled to suspend work on the building for want of funds, as indicated in said report. Congress at its last session appropriated \$3,500 for the purpose of finishing the building. When that appropriation became available we caused work on the building to be resumed, and it will soon be completed. We have expended so far on the building \$21,000, and on its completion, including some extra work absolutely necessary, our entire resources will be exhausted in paying for it. We will then have a valuable property, suitable for the purpose for which Congress created this corporation, but will be without means to furnish it and put it into practical use. We have caused a board of lady managers to be organized, with a view to aid in securing contributions from the charitable and to assist in the proper management of the institution when it goes into practical operation.

The necessity for this institution is almost daily rendered apparent by the police reports of abandoned and murdered infants. If we had means to start it in actual operation, we have no doubt that the exhibit of good and needed work being done by it would so appeal to the pub-

lie as that we could largely rely upon private contributions to very materially aid in paying its running expenses. But in the present condition of things the receipts from private contributions are very small, and we have therefore to urge upon you to recommend that Congress appropriate not less than \$10,000 at its next session for the benefit of this charity. It will require that amount and more to furnish the building and pay its running expenses for the year. With that amount we could put the hospital in such condition as would attract public attention and draw to it many contributions which under existing circumstances will not be made.

Z. T. SOWERS,
President.
A. C. RICHARDS,
Secretary.

The SECRETARY OF THE INTERIOR.

REPORT OF THE COLUMBIA INSTITUTION FOR THE DEAF AND DUMB.

COLUMBIA INSTITUTION FOR THE DEAF AND DUMB,
Kendall Green, near Washington, D. C., October 5, 1886.

SIR: In compliance with the acts of Congress making provision for the support of this institution, we have the honor to report its progress during the year ended June 30, 1886:

The pupils remaining in this institution on the 1st of July, 1885, numbered.....	87
Admitted during the year	21
Since admitted.....	18
Total.....	126

Under instruction since July 1, 1885, males, 104; females, 22. Of these 50 have been in the collegiate department, representing 13 States and Ireland, and 76 in the primary department.

A list of the names of the pupils connected with the institution since July 1, 1885, will be found appended to this report.

HEALTH OF THE INSTITUTION.

The cases of illness among the pupils during the year have been few and light. No death has occurred, and we can give thanks to the Power above for an extended period of general good health.

COURSES OF INSTRUCTION AND LECTURES.

The work of instruction in the several departments of the institution has gone forward essentially as in recent years. Students and pupils have shown commendable diligence, and our valued instructors have evidenced zeal and intelligence in the work committed to them deserving of the warmest approval.

In addition to the daily instructions of the class-room, lectures have been given as follows:

To the students of the National Deaf-Mute College:

The Silver Question. By President Gallaudet.

Banking and Exchange. By Professor Porter.

Dante's Purgatorio. By Professor Fay.

A Talk about Grass. By Professor Chickering.
The Twilight of Deaf-Mute Instruction. By Professor Gordon.
Waterloo, Then and Now. By Assistant Professor Hotchkiss.
Fame and its Memorials. By Assistant Professor Draper.

To the pupils of the Kendall School:

The Adventures of Ulysses. By Mr. Denison.
The Early History of the United States Navy. By Mr. Ballard.
Mary Queen of Scots. By Mr. Kiesel.
The Indians of the Plains. By Mr. Bryant.

Through the kindness of several members of the senior class, who volunteered their services, the following lectures were added to the course usually given to the pupils of the school:

Childhood in Greece. By Mr. Adams.
Sir Walter Raleigh. By Mr. Berg.
William Lloyd Garrison. By Mr. Cloud.
John Paul Jones. By Mr. Dantzer.
Attraction of Gravitation. By Mr. Hanson.

THE KENDALL SCHOOL.

The building spoken of in our last report as nearly finished was completed and occupied in December. It affords ample accommodations for all the school work of our primary department, and will not need to be enlarged for a number of years.

THE LABORATORY AND SHOP BUILDING.

Congress at the session closed in August made an appropriation of \$8,000 for the erection of a laboratory and shop building. This sum, together with an available balance on hand for building purposes, has been nearly expended in the erection of the building above alluded to. In this building, which is 50 by 30 feet, and four stories high, there will be assay furnaces, an engine-room, a working laboratory, and chemical lecture-room on the two lower floors for the college, with ample space on the two upper floors for several new industries, by engaging in which the boys of our Kendall School will derive great practical advantages.

EXERCISES OF PRESENTATION DAY.

The exercises of the regular public anniversary of the college took place on the 5th of May.

An account of these exercises will be found appended to this report.

CONFERRING OF DEGREES AND DIPLOMAS.

At the close of our academic year in June, the degree of Bachelor of Arts was conferred on Albert Berg, of Indiana; James Henry Cloud, of Illinois; Charles Orvis Dantzer, of Indiana; Albert F. Adams, of Iowa; John H. Dundon, of New York; and Olof Hanson, of Minnesota, valedictorian of his class. A diploma of honorable dismissal was awarded to Thomas Lynch of Illinois, all these having been students in the college.

Certificates of honorable dismissal from the Kendall School were given to Frank G. Wurdeman, John O'Rourke, George T. Sanders, Harry L. Stafford, Harry E. Marsh, and William D. Himrod.

RECEIPTS AND EXPENDITURES.

The receipts and expenditures for the year now under review will appear from the following detailed statements:

I.—SUPPORT OF THE INSTITUTION.

RECEIPTS.

Balance from old account	\$1,005 23
Received from Treasury of the United States.....	55,000 00
Received from manual-labor fund.....	312 00
Received from board and tuition	5,541 72
Received for work done in shop.....	6 00
Received from sale of old lumber	28 03
Received for damage to grounds.....	4 00
Received from sale of old furniture	40 65
Received from sale of old buggy.....	31 50
Received from sale of grease.....	22 35
Total.....	61,991 53

DISBURSEMENTS.

Expended for salaries and wages out of appropriations by Congress.....	\$24,968 63
Expended for salaries and wages out of funds belonging to the institution	5,130 59
Expended for groceries.....	2,417 91
Expended for meats.....	3,558 48
Expended for potatoes	428 80
Expended for household expenses, marketing, &c	2,599 73
Expended for butter and eggs.....	2,078 75
Expended for repairs.....	2,886 94
Expended for permanent improvements.....	4,293 31
Expended for furniture	953 62
Expended for lumber	1,135 52
Expended for ice.....	185 65
Expended for printing	86 59
Expended for medicines and chemicals	201 21
Expended for hardware.....	412 65
Expended for fuel	1,658 86
Expended for blacksmithing	109 40
Expended for harness and repairs	144 35
Expended for bread.....	1,129 56
Expended for illustrative apparatus	77 35
Expended for medical and surgical attendance.....	164 20
Expended for flowers and plants	169 00
Expended for paints	318 59
Expended for dry goods and clothing	602 96
Expended for flour and feed.....	682 91
Expended for gas	1,006 10
Expended for rent of telephone	80 00
Expended for live stock.....	270 00
Expended for entertainment of pupils	35 00
Expended for farm tools, seeds, &c	130 79
Expended for wagon, repairs, &c.....	176 00
Expended for auditing the accounts of the institution and for traveling expenses of non-resident directors in attending meetings of the board..	340 00
Expended for hand-grenades	40 00
Expended for amount refunded to the United States for disallowance and error in accounts.....	20 20
Expended for expenses of principal in attending convention of teachers in California	200 00
Expended for books, &c.....	1,039 09
Expended for manure.....	82 25
Expended for milk.....	145 61
Expended for grading.....	297 72
Expended for complete system of electrical clocks.....	313 00
Expended for memorial tablets	350 00
Balance	870 21
Total.....	61,991 53

II.—BUILDINGS AND GROUNDS.

RECEIPTS.

Received from Treasury of the United States..... \$17,000 00

DISBURSEMENTS.

Expended on contract with E. F. Jones for brickwork	4,539 66
Expended on contract with J. B. Hammond for doors, sash, &c.....	1,478 25
Expended for architect's services	740 00
Expended for grading and sodding.....	332 70
Expended for heating apparatus.....	1,200 00
Expended for lumber	1,117 94
Expended for slating	414 00
Expended for iron work	195 00
Expended for stone work.....	1,405 00
Expended for terra cotta.....	180 00
Expended for plastering.....	630 00
Expended for hardware.....	150 67
Expended for paints and painting	417 56
Expended for contract with Obold & Dwire for wood work.....	1,604 50
Expended for plumbing.....	514 20
Expended for contract for brickwork with B. H. Ellett.....	1,703 77
Expended for sandstone and cement	199 55
Expended for wages.....	81 50
Expended for glass windows.....	89 00
	<hr/>
	17,000 00

ESTIMATES FOR NEXT YEAR.

The following estimates for the service of the fiscal year ending June 30, 1888, have already been submitted:

For the support of the institution, including salaries and incidental expenses, and for books and illustrative apparatus, for general repairs and improvements, \$55,000.

For the improvement of the grounds, including pavements near the new buildings for the Kendall School and the laboratory and shop buildings, \$1,700.

Also the following for the current fiscal year:

For current expenses for the year ending June 30, 1887, in addition to the amount already appropriated, \$2,500.

The first estimate is the same amount as has been submitted for the last five years.

The second estimate is to provide for certain much-needed improvements on the grounds, especially to complete a roadway leading from the main group of buildings to the farm, and to complete the surroundings of the two new buildings recently erected.

The third estimate is to cover a deficiency occasioned by the cutting down of our estimate for current expenses for this year.

It will be remembered that in our last Annual Report mention was made of the fact that the cost of providing for the education of the imbecile children of the District out of our current-expense fund had become so great as to make it necessary either to increase the amount of our appropriations or to relieve our institution of that responsibility and provide a separate appropriation for the education of imbeciles.

Congress acted on our suggestion and made a separate appropriation of \$2,500, but diminished our current-expense appropriation in precisely that amount, thus actually requiring this institution to do what we had said in advance it was not able to do. It is hoped that Congress will see the justice of making up this deficiency.

CONVENTION OF TEACHERS.

By direction of the board the president of the college and the principal of the Kendall School represented the institution as official delegates in the Eleventh Convention of American Instructors of the Deaf, held at Berkeley, Cal., July 15-21.

ADMISSION OF YOUNG WOMEN TO THE COLLEGE.

Among the papers presented at the California convention was a communication from a very bright deaf young lady, urging that the doors of our college be opened to those of her sex.

A communication on the same subject, and urging the same action, has been lately addressed to the president of the college by the Western Association of Collegiate Alumnae, meeting at Indianapolis on the 22d of May last. This latter communication urges with much force that deaf young women ought to be permitted to share in the advantages afforded by the bounty of Congress for higher education to the deaf young men of the country.

The faculty of the college favor the admission of young women, at least as an experiment.

Their presence in the college would entail no increased cost for instruction, which is the most considerable item of expense in carrying on the college.

The board of directors are disposed to take this subject into very serious consideration; and while they are not prepared to make a definite recommendation in this report, they respectfully ask the attention of Congress to the matter, as deserving of favorable action in the near future.

All of which is respectfully submitted, by order of the board of directors.

E. M. GALLAUDET,
President.

Hon. L. Q. C. LAMAR,
Secretary of the Interior.

REPORT OF THE UTAH COMMISSION.

CHICAGO, ILL., *September 24, 1886.*

SIR: We respectfully submit a report of the operations of this commission during the past year, together with some observations on the present condition of Utah.

It is hardly necessary to set forth in detail our proceedings in relation to the execution of the law, as this would be substantially a repetition of what has been stated in our former reports. It is perhaps sufficient to say in general, that during the past year, as in the last and previous years, the law relating to the disfranchisement of polygamists and those living in unlawful cohabitation has been fully and successfully enforced.

All such persons, with very few, if any, exceptions, have been excluded from voting and holding office. During this period, as in the preceding year, criminal prosecutions for violations of the law of Congress have been numerous. A large number have been fined and imprisoned in the penitentiary for polygamy or unlawful cohabitation, chiefly for the latter offense.

It is reported and believed by many resident non-Mormons that during the last year a large number of polygamous marriages have taken place in the temples of Logan City and Saint George, located respectively in the extreme north and south parts of the Territory. We have not the means of verifying such reports, yet we have no doubt that a considerable number of such marriages have been celebrated with the knowledge, approbation, and active co-operation of leading men of the Mormon Church. Whether upon the whole polygamous marriages are on the decrease in Utah is a matter on which different opinions are expressed; but undoubtedly many persons have been restrained by the fear of disfranchisement and the penitentiary, and we think it is safe to say that in the more enlightened portions of the Territory, as, for example, Salt Lake City and its vicinity, very few polygamous marriages have occurred within the last year, while, on the other hand in the rural districts in some parts of the Territory we have reason to believe that such violations of the law are not infrequent.

By the law of Congress the duties of this Commission appertain to all elections—territorial, county, precinct, and municipal. The municipal elections occur under legislative provisions or local ordinances, at various times during the year; and at the proper time before the election in each city and town we are required to appoint the registration officers, judges of election, &c. This work was begun early in the present year. Besides, registration officers for each county and precinct were appointed to the number of about 280, and judges for the general election to the number of over 800 were selected and commissioned. These officers were chosen after diligent inquiry as to their fitness and qualifications.

Under the local law, as modified by the act of Congress, two revisions of the registration were made in the spring and summer, preparatory to the annual general election on August 2, at which time there were chosen three "commissioners to locate university lands," county sheriffs, clerks, probate judges, selectmen, assessors and collectors, prosecuting attorneys, treasurers, coroners, and various precinct officers, such as justices of the peace and constables.

A board of canvassers consisting of three non-Mormons and two Mormons, intelligent and reputable gentlemen, appointed by this Commission, assembled in Salt Lake City and canvassed the election returns; and it appeared that all the candidates of the "People's" or Mormon party (except a few precinct officers) were elected, and certificates of election were given accordingly.

On January 11, 1886, the legislative assembly of Utah met in Salt Lake City, and remained in session sixty days. A bill concerning registrations and elections was passed by the two houses of the legislative assembly, but failed to become a law through the disapproval of the governor.

The effect of such bill would have been to return the registration and election machinery to the local agencies, from which they were taken by the act of Congress, and to restore to the mormon people the political power of the Territory, in derogation of the act of Congress referred to.

Since we submitted our last report, joint resolutions have been brought forward, and are now pending in both Houses of Congress, proposing an amendment to the Constitution of the United States prohibiting and punishing polygamy in all the States, and in all places within the jurisdiction of the United States; extending the judicial power of the Federal Government to the prosecution of such offenses, and conferring upon Congress the power to provide for their punishment. A bill which

passed the Senate at the last session of Congress is now pending in the House, which, with the amendments proposed thereto by the Judiciary Committee of the House, furnishes a comprehensive plan for the treatment of public affairs in Utah. Bills have also been heretofore introduced into Congress proposing substantially to abrogate the local legislative authority in Utah, and to substitute a legislative commission to be appointed by the President.

After the careful and deliberate consideration that has evidently been given by the Judiciary Committees of the two houses of Congress to the recommendations of the President, the suggestions made through the reports of this Commission, which clearly appears from the bill referred to, in which nearly all of our recommendations have been incorporated, we deem it unnecessary to press our views further at this time upon the same topics. But we consider it not improper or superfluous to make some observations in regard to the proposed constitutional amendment. While we are of the opinion that this should not supersede other measures, we are satisfied that it would be an efficient factor in effectuating the desired result, namely, the abrogation of polygamy wherever it exists within the jurisdiction of the United States. In addition to the reasons so forcibly presented by the Judiciary Committee in their very able report accompanying the joint resolution, we would suggest that the incorporation of this provision in the Constitution of the United States would serve as an advertisement to the people of all civilized nations that in the United States polygamy had been put under a ban in the most authoritative and emphatic manner, so that the most ignorant of the deluded immigrants might reasonably be expected to take cognizance of the constitutional inhibition, and the consequences of violating the laws.

Again, the Mormon leaders have taught their people that the laws against polygamy are unconstitutional. They profess a high regard for the Constitution as an inspired instrument. But they claim that it has been subverted and misinterpreted by Congress and the courts. Now, if the anti-polygamy amendment should become a part of the Constitution they would probably not have the hardihood to say that the Constitution itself is unconstitutional, and it is not unreasonable to predict that the more sagacious and influential persons among the Mormons would realize the hopelessness of a further conflict with the Government, and accommodate themselves to the inevitable by the exercise of that "worldly wisdom" which so often tempers and modifies the conduct of religious fanatics.

In regard to the bill hereinbefore referred to (Senate bill 10, amended in the House committee, and reported June 10, 1886), we would suggest that section 25 should be changed so as to require the registration and affidavit to be made before the proper registration officer of the precinct, at the usual time of registration when the voter takes the oath required by law for registration. As the section of the bill now stands, such oath and registration are to be made before the clerk of the probate court of the county. Many of the counties are very large; some of them more than a hundred miles long, and travel in many localities is much impeded by the ruggedness of the mountain roads, and at certain seasons of the year by deep snows, and many of the voters would not be willing to incur the expense and loss of time required to go to the county seat to be registered. Besides, the amendment which we have suggested would be in harmony with the registration and election laws of the Territory, as modified by the act of Congress.

In our last report we called attention to the propriety of amending the immigration laws so as to extend their application to the Mormons.

The President, also, in his annual message in December last, called the attention of Congress to the same subject. It seems to us that such an act properly guarded should be framed so as to forbid the immigration of all aliens into the United States who are polygamists, or who uphold polygamy by their profession.

The fullness of detail with which we have in our former reports set forth the condition of affairs in Utah dispenses with the necessity of again going into particulars, but we deem it proper to repeat a passage contained in our report of November 18, 1884.

As the Government has to deal here with a people who are wonderfully superstitious and fanatically devoted to their system of religion, the public should not expect, as the immediate result of the present laws of Congress, nor indeed of any legislation, however radical, the sudden overthrow of polygamy; and the most that can be predicated of such legislation is, that it will, if no step backward be taken, soon ameliorate the harder conditions of Mormonism, and hasten the day for its final extinction.

Before closing this report we wish to impress upon the Government and the people of the United States the magnitude of the evil with which we have to contend, and the difficulties in the application of a remedy. The total number of Mormons throughout the world is over 200,000, a large majority of whom reside in Utah. While of these a great majority of the adults are not living in polygamy, yet every orthodox member of that church professes to believe in it as a divine revelation. The people have been taught this dogma in their temples, tabernacles, meeting-houses, and Sunday schools for a third of a century. Their church organization and ecclesiastical polity are marvels of skill and ability. Their leaders are fertile in resources, while the mass of the people are fanatical and superstitious to a degree that has seldom been witnessed in modern times.

In such a condition there is no remedy that would be immediate in its effects except military force, and this cannot now be applied, because no civilized government in this age will wage a war of extermination against unarmed men, women, and children. But the evils existing in Utah cannot be ignored by the Government. Devoted as the American people are to religious liberty, by education, tradition, and constitutional sanction, they will never allow this principle to be subverted by the toleration or sanction of crime. Here we may say that while we recognize the obligation of the Government of the United States to protect the personal and property rights of the Mormon people, collectively and individually, and to deal with them as equals before the law, yet it is equally the duty of the Government to punish crime committed within its jurisdiction; and religious liberty cannot be pleaded as a bar to punishment for criminal acts in violation of the laws of the land and of social order.

The Mormon people ought to understand this. If they expect a toleration or protection of polygamy from any party or faction in this country, now or hereafter, such expectation is vain and futile. The laws, then, must be enforced. If present laws and the proposed amendments are not sufficient to suppress the evil, more stringent enactments must be adopted, and the result will be that at no distant day this relic of Asiatic barbarism, this blot on the fair fame of America, will be swept from the land.

For the Commission.

A. B. CARLTON,
Chairman Utah Commission.

The SECRETARY OF THE INTERIOR,
Washington, D. C.

REPORT OF THE SUPERINTENDENT OF THE HOT SPRINGS RESERVATION.

HOT SPRINGS RESERVATION,
OFFICE OF SUPERINTENDENT,
Hot Springs, Ark., September 29, 1886.

SIR: In obedience to the instructions contained in your letter of August 5, 1886 I have the honor to submit the following report of the operations of this office for the fiscal year ending June 30, 1886:

On entering upon the duties of this place, the first charge imposed upon me by the Secretary was to make as thorough an inspection as was then possible of the creek improvement, which had shown signs of weakness at one place, to report the nature and extent of the defects, and the repairs necessary to make the work sound and acceptable.

Upon the receipt of my report at the Department the contractor was required by the Secretary to resume work upon the culvert, and to rebuild it satisfactorily to the Superintendent without additional compensation by the Government, the sum reserved by the Department from past estimates being ample to compel the observance of this requirement.

Accordingly, during the months of December and January, Mr. Samuel Walton, representing the contractor, tore down and rebuilt, under my direction, a section of the arch 60 feet long, 120 linear feet of wall, laid a rock pavement 17 feet wide and 180 feet long in the bed of the creek, where the foundations of the work seemed insecure, and did it all, it gives me pleasure to say, without protest or complaint, whilst evincing a desire to do everything reasonable to make the work sound and durable.

Frequent explorations through the culvert have since been made, and no further evidences of weakness are apparent.

In May last, W. P. Aldrich, being the lowest bidder, was awarded the contract for continuing the culvert, upon like specifications and conditions to the Bardwell contract, to the southern boundary of the permanent reservation and across Reserve street. He also contracted to furnish and lay cast-iron pipes for the collection and distribution of all that hot water which issuing below the plane of the bath-houses, had always flowed to waste.

Both works are now satisfactorily completed, at a cost to the Government of \$6,349.97; and a 12-inch pipe (buried low enough to receive by gravity the water from the springs at the lowest elevation) is laid for 1,000 feet along the reservation front, and is connected by lateral pipes of 3 and 4 inches in diameter with every spring not otherwise utilized.

A rough measurement of the volume of hot water, thus for the first time collected and flowing out through this main, gives 300,000 gallons per day, which for the want of reservoirs to receive and store it, or any means of conveying it to the bath-houses, is temporarily led into and mingles with the water of the creek.

I respectfully recommend that Congress be again asked to appropriate the sum (\$30,000) embraced in the Secretary's last annual report for supplying reservoirs and machinery, which are absolutely required to give effect and use to this 300,000 gallons of invaluable water.

Until some adequate provision is made for storing and pumping this water to a height from which it will naturally flow to the bath tubs,

neither the Government nor invalids can reap any benefit from the work thus far completed.

The system now and heretofore advocated has been adopted for the service of the Army and Navy Hospital, and is now in process of execution under a recent special appropriation made for that purpose.

I beg to renew my recommendation of last year that the water-rent be increased to \$40 per tub per annum.

I believe that the lessees of the water privileges can pay that sum and still make a fair profit; and the additional revenue accruing from this source, if used to improve and beautify the grounds, would bring a substantial return to the lessees themselves in the greater number of visitors that would be induced to come and bathe here.

In my report of a year ago the following language was used:

The work known as the creek improvement stands above all other heretofore undertaken in importance and usefulness, and whilst there has been some criticism of its quality, the only serious objection to the principle followed is that the culvert is made the open receptacle for sewerage, instead of having it carried away through pipes. A plan is now being agitated, and will doubtless soon be perfected, for making this substitution. The city proposes to lay a line of sewer-pipe from its northern to its southern limits on either side of Park street and Central avenue, and thus maintain the water and atmosphere of the tunnel fresh and pure. It is suggested, and not without some show of reason, I think, that the Department should defray the expense of this pipe—about \$800—where it runs through the permanent reservation—that is, for a single line of pipe laid from the Arlington Hotel to Reserve street.

Since that statement was written, indeed very recently, the plan above indicated has been perfected, and a 10-inch sewer is now laid, which withdraws all the reservation sewerage from the culvert and deposits it through this pipe into the creek, a mile below the permanent reservation.

During the past winter the excavations for foundations for new buildings belonging to private individuals developed a large amount of earth and other filling, which the parties having to remove were glad to dump upon the nearest spot permissible. In this way I was fortunate enough to obtain and deposit upon the places below grade on the reservation front, without cost to the Government, about 7,000 cubic yards of filling, which, under ordinary circumstances, would have cost quite a sum of money to procure. Latterly the supply from that source has vanished, and the date of its renewal is conjectural. There still remain about 4,000 yards of earth yet needed before the front is brought up to grade and ready to be inclosed.

The free pools, which are devoted exclusively to the use of the indigent invalids, have lost nothing of their fame or patronage. An average of 300 poor and afflicted, of both sexes, daily resort to them with perceptible good results; and as the number is likely to increase, the pool allotted to males will soon be too small to accommodate all who desire to use it. The building stands upon a conspicuous site—the sole representative (of its kind) of the Government—and its mean appearance contrasts most unfavorably with the private enterprises around it. The attention of the Secretary was especially invited to this matter in my letter of March 5, 1886.

For the want of sufficient available means with which to enlarge the pool and erect a permanent building over it creditable to the Government and commensurate with the needs of the afflicted poor, I shall in a few days submit a sketch and estimate, and ask authority of the Secretary to make such alterations and improvements in the existing flimsy structure as will secure to those whose misfortunes compel them to re-

sort to it during the coming winter more comfort and benefit than will otherwise be obtained.

I am, sir, very respectfully, your obedient servant,

CHARLES W. FIELD,
Superintendent.

THE SECRETARY OF THE INTERIOR,
Washington, D. C.

REPORT OF THE SUPERINTENDENT OF THE YELLOWSTONE NATIONAL PARK.

MAMMOTH HOT SPRINGS, WYOMING,
August 20, 1886.

SIR: In compliance with your request of July 31 I have the honor to submit the following report of the operations of my office for the year ending June 30, 1886.

I assumed control of the Park as Superintendent on the 1st day of July, 1885. When I took control I found everything in confusion. Buildings in a dilapidated condition, fences down, the stock in a run-down and unserviceable condition from hard usage and improper attention. I immediately set to work to recruit the stock and get such of it as was possible in a serviceable condition. I have built about 4 miles of pasture fence, and repaired all the buildings and made them ten-antable. I built an addition to one of the assistant superintendent's houses which I occupied as a headquarters during the long, cold winter, and have continued to occupy up to this time. A new building for the Superintendent should be built at the earliest possible time, where wood and water are convenient and the residence accessible.

EXPENDITURES.

Of the \$40,000 appropriated by the act of Congress for the protection and improvement of the Yellowstone National Park for the fiscal year ending June 30, 1886, \$39,000 have been placed to my credit and has been disbursed.

ROADS AND BRIDGES.

The roads and bridges in the Park, constructed by Capt. Dan C. Kingman, Corps of United States Engineers, are in good condition, but owing to the want of funds and the failure of Congress to make an appropriation for roads in the Park earlier in the season there has been nothing, except repairing the roads already constructed, done. No new roads have been built this season, and the season is so far advanced now that there can be very little accomplished before the cold weather sets in. I am, however, informed by Captain Kingman that work on the roads will be continued until some time in October, or as long as the weather will permit. Of Captain Kingman's work in the Park too much cannot be said in praise.

HOTEL ACCOMMODATIONS.

The hotel accommodations have been far better this season than ever before. The Yellowstone Park Association have leased hotel sites at

Mammoth Hot Springs, Norris Geyser Basin, Upper Geyser Basin, and the Grand Cañon, and have run hotels and furnished good accommodations at all the above-named places at reasonable rates. They have completed the erection of a splendid new hotel building on their lease at Norris, and contemplate building new hotels at all the other points mentioned as soon as practicable and before the commencement of the tourist season next year.

TRANSPORTATION.

The transportation during the season has been good and ample to accommodate the heavy travel. No serious accident of any kind has occurred to my knowledge, and no complaints have been made by any one.

LAWS OF THE PARK.

I would most earnestly call your attention to the entire inadequacy of the laws to provide punishment for violations of the regulations for the protection of the Park. In fact, so far as the enforcement of the laws of the Park proper there is no system available by which it can be done. The protection that I have been able to give the Park has been through the Territorial laws of Wyoming, which the legislature repealed last winter. I would suggest that a law be enacted by Congress establishing a court within and for the Yellowstone National Park, with exclusive jurisdiction of all misdemeanors, and with power to examine and hold to bail all cases of felonies, to be tried at the nearest court having criminal jurisdiction; that the assistant superintendents be authorized to serve any process of said court; that the judge thereof be a man learned in the law and of good moral character. With a court of this character, and an efficient force of assistants to act as ministerial officers, there would be comparatively little trouble in protecting and keeping the Park in a state of preservation, beautiful to look upon; but unless some stringent enactment is made, and that at the earliest possible time, it will be too late. One of the most difficult things I have had to contend with was the prevention of fires in the Park, of which, I am happy to say, up to this time none have occurred worth mentioning. A very stringent law should be enacted against the spread of fires or leaving camp-fires without extinguishing them completely.

LINES OF THE PARK.

I would most respectfully suggest that it is of the greatest importance that the lines of the Park be surveyed at the earliest possible time, and so marked that there can be no mistaking them. This I deem next in importance to the organizing of a proper court for the protection and enforcement of the laws of the Park.

GAME.

There is more game in the Park now of every kind than was ever known before. Elk, antelope, deer, and mountain sheep are here in large bands, and within less than four miles of Mammoth Hot Springs. I have since I came here paid particular attention to the enforcement of the laws for the protection of the game, and have by their rigorous enforcement stopped the wholesale slaughter of game that existed theretofore. In the enforcement of the law I have been greatly assisted by assistant superintendents O. J. Baronett, Ed. Wilson, William Wilson,

E. L. Fish, Monroe Berry, William McClellan, Thomas E. Brocken, and George. B. Miller, whose services have been invaluable, and too much praise cannot be awarded them for the faithful and efficient manner in which they have discharged their duties; better men for the service would be hard to find. In order to protect the trust confided to my keeping, I remained at my post of duty all last winter and kept my men constantly on the scout for trespassers, hunters, and other violators of the law. When the snow got too deep for them to travel on horseback I sent them out on snow-shoes. I think I am justified in saying that there have been fewer violations of the law and better order in the Park during the past year than was ever known before.

TRAVEL.

The travel in the Park this season has been much greater than ever before. Many distinguished persons, both from home and abroad, have come to see the wonders of the nation's play-ground, and I am gratified to say that none, so far as I have been able to learn, have been disappointed, no complaints having been made to me by any one.

APPROPRIATION.

I would most respectfully repeat my recommendation for the appropriation asked last year, as follows:

For every object and purpose necessary for the protection and improvement of the Yellowstone National Park, \$150,000, as follows:

For pay of superintendent	\$3,500
For pay of 15 assistant superintendents, at \$1,000 each per year.....	15,000
For pay of one secretary.....	1,500
Incidental expenses.....	7,500
For headquarters building and other buildings for Government use	10,000
For suitable stables and sheds for the use of Government stock	2,500
For extinguishment of claims prior to the dedication of the Park, or as much thereof as may be awarded by a duly constituted commission to be appointed by the Secretary of the Interior	5,000
For the erection of telephone wires for the use of the officers of the Park....	5,000
For construction of roads and bridges.....	100,000

Congress having failed to make any provision for the pay of the Superintendent or his assistants or for the protection of the Park, I was notified on August 14, by telegram from the Secretary of the Interior, that he had called upon the Secretary of War for a detail of soldiers to do duty in the Park, and that Capt. Moses Harris's Troop M, First United States Cavalry, would arrive in a few days, and was directed upon the arrival of Captain Harris to turn over to him all public property in my charge, taking receipts therefor. On the 17th of August Captain Harris, with 50 men of Troop M, First Cavalry, arrived in the Park. On the 20th of August he assumed control of affairs in the Park and I turned over to him all public property in my charge, taking receipts therefor as instructed.

Before closing my report I desire to say that I have endeavored to do my duty, and my whole duty, fearlessly and without favor or affection toward any one. In my official capacity I have done nothing that I would not do over under similar circumstances, and have no apologies or excuses to offer for anything I have done.

I am, sir, very respectfully, your obedient servant,

D. W. WEAR,

Superintendent Yellowstone National Park.

The SECRETARY OF THE INTERIOR,
Washington, D. C.

REPORT OF CAPT. MOSES HARRIS, FIRST CAVALRY, ACTING SUPERINTENDENT.

YELLOWSTONE NATIONAL PARK,
OFFICE OF SUPERINTENDENT,
Mammoth Hot Springs, Wyo., October 4, 1886.

SIR: In compliance with your telegram of the 31st ultimo, I have the honor to submit the following report:

In obedience to the orders of my military superiors I arrived with my command, Troop M, First United States Cavalry, at the Mammoth Hot Springs, Yellowstone National Park, late in the evening, August 17, 1886, and at once reported by telegraph to the honorable Secretary of the Interior. Having, in response to my telegram, been informed that it was desired that I should assume the duties previously performed by the superintendent of the Park, I assumed those duties, relieving Col. D. W. Wear, the late superintendent, August 20, 1886. Colonel Wear accompanied me through the Park, and I stationed detachments from my command at the following points, viz: The Norris Geyser Basin; the Fire Hole, or Lower Geyser Basin; the Upper Geyser Basin; the Grand Cañon, or Falls of the Yellowstone; Riverside, on the Madison River; and Soda Butte, on the road to Cook City. These stations have been continued to the present time, and from frequent inspections made by myself and the officers of my command I am assured that the private soldiers and non-commissioned officers in charge have performed their duties faithfully, and that the Park has received all of the protection possible under the circumstances. A copy of the order published for the guidance of these several detachments in the discharge of their duties is forwarded with this report and marked A. It is proper to here state that much efficient assistance has been rendered by the following-named gentlemen, who were formerly employed as assistant superintendents, viz: Mr. C. J. Baronett, William McClellan, and Ed. Wilson. The first-named has been employed as a scout and guide under authority received from the War Department, and, owing to his long experience and perfect familiarity with the mountain trails, his services are invaluable. It is to be regretted that it has been found inexpedient to authorize the employment of more than one of these experienced scouts.

Upon assuming my present duties I found two persons, Mr. Metcalf and a Mrs. Crary, residing at the Mammoth Hot Springs in violation of the Park regulations, and I at once served each of them with the requisite thirty days' notice to vacate. The order was promptly obeyed in both instances, and the buildings improperly occupied will soon be demolished and removed. I have also found it necessary, for the preservation of good order and property, to expel a number of disreputable characters from the Park. This is at present the only authorized method for the enforcement of good order in the Park, and although the exercise of this authority may at times appear harsh and arbitrary, it is indispensable to the proper protection of life and property. I have also found it necessary to forbid the turning loose of stock to graze in the vicinity of the Hot Springs and Geyser formations. This practice was not only a source of annoyance to visitors, but of much injury to the formations.

FOREST FIRES.

I regret to have to report that destructive forest fires have been raging in the Park during the greater portion of the present season.

The most destructive one, which was burning when I arrived in the Park, originated on the 14th of August last, near the East Fork of Gardiner River, in full view from the Mammoth Hot Springs Hotel and about seven miles distant. This fire is still burning, and has extended over a tract of country some ten or twelve miles in length by three to five in width.

It was the opinion of my predecessor, Colonel Wear, that this fire was started maliciously by some of his personal enemies; but nothing is positively known as to its origin. Another fire, of less magnitude, originated on Tower Creek about the 10th of September. It was confined principally to the timber along the creek. Several other fires have originated, and after burning a short time have either been extinguished by the efforts of the men of my command, or have failed to spread destructively from the absence of suitable material. A large number of fires have been extinguished by men of my detachments stationed through the Park, many of them under circumstances which led to the belief that they had been set maliciously. The most of these fires originated on the eastern side of the Park, near the road from Gardiner to Cook City, and while some of them may have been started maliciously, the most of them were probably caused by the carelessness of camping parties. Those fires which have been started intentionally may be attributed to unscrupulous hunters, who, being prevented from hunting in the Park, resort to this method of driving the game beyond the Park limits. The Park is surrounded by a class of old frontiersmen, hunters and trappers, and squaw-men, who, as the game diminishes outside the Park, increase their efforts and resort to all sorts of expedients to get possession of that which receives the protection of law. The facility with which forest fires can be started, and the impossibility of extinguishing them, when once under way, by any available methods, render it extremely difficult in this high and wind-swept region to guard against them. The only provision against them which can be proposed is that which is also required for the protection of the Park in other respects—"a stringent law vigorously enforced." Two fires were started on the west border of the Park some two weeks ago; and the presence of a small band of Bannock Indians from the Lemhi Reservation, who left as soon as the fires were seen well under way, was to me a sufficient explanation of their origin. Fortunately, they were extinguished by an opportune snow-storm before much damage had resulted. A considerable band of these Indians approached the western border of the Park, along the Beaver Cañon road, in the latter part of August last; but upon my reporting the fact by telegraph to the Department, they were promptly recalled by their agent. These Indians are, however, allowed entirely too much liberty, and are a constant source of annoyance. They visit the Madison Valley, on the western border of the Park, and in their hunting excursions are not particular whether they cross the line of the Park or not. It is reported to me that they are incited to hunt in the Park by unscrupulous white men, who also furnish them whisky.

GAME AND ITS PROTECTION.

From the reports of reliable scouts, familiar with the ranges of the elk, the deer, and the buffalo, there can be but little doubt that there is an abundance of game in the Park. Detachments from my command on the eastern and western sides of the Park have constantly scouted the portions of the Park not frequented by ordinary tourists, and the scout Barronett has also been constantly on the go, watching suspected

parties. I am confident that up to the present date there have been no depredations of any magnitude, and that the game has been well protected.

THE GEYSERS.

It is apparent from the most casual observation that the means heretofore employed for the preservation of the natural objects of wonder and beauty in the Park have been entirely inadequate. It may be said without exaggeration that not one of the notable geyser formations in the Park has escaped mutilation or defacement in some form. Those that have been most fortunate are covered with lead-pencil inscriptions recording the names of those shallow minded visitors to whom such distinction is a pleasure. A lead-pencil mark seems to be a very harmless defacement, but names bearing date of 1880 are still discovered through the thin deposit of silica, and if this marking should go unchecked, in a very few years these once beautiful formations will have become unsightly and unattractive objects. At the Upper Geyser Basin names with date of June, 1886, have been chiseled into the soft geyserite so deep that, in the slow process of nature, many years must elapse before this mutilation will be obliterated. Not content with the defacement of the formations, efforts are constantly being made to destroy the geysers themselves by throwing into them sticks, logs of wood and all sorts of obstructions. The eruptive force of several of the geysers has been totally destroyed by vandalism of this character. The footsteps of the throngs of visitors are wearing away the delicate lace-like tracery of the silicious deposits, and in a few years the formations surrounding the geysers will present the appearance of the pavements of a city street. The willful defacement of these beautiful objects can only be prevented by watchful supervision, supported by the rigid enforcement of lawful penalties. A certain amount of wear and deterioration, incident to the multitude of visitors, is probably unavoidable.

ROADS.

Cap. Dan O. Kingman, Corps of Engineers, United States Army, the officer in charge of the construction and improvement of the roads of the Park, will doubtless submit, through the chief of his corps, a detailed report of the work performed under his supervision.

The small appropriation for the construction of roads and bridges in the Park for the present fiscal year was not made available until towards the last of August, and it was not until the first part of September that work was finally commenced; but by the vigorous efforts of Captain Kingman much good work has already been accomplished, and before the end of the season it is expected that the new road from Norris Geyser Basin to the Grand Cañon and Falls of the Yellowstone will be completed, and a bad piece of road along the Obsidian Cañon where construction is extremely difficult, thoroughly improved.

After consultation with Captain Kingman, I have, in my estimate, appropriated for the fiscal year ending June 30, 1888, the amount which can be judiciously and economically expended in the construction and improvement of the roads of the Park at \$150,000. The appropriation by Congress of this amount will render it practicable to construct a good road from the Upper Geyser Basin, the terminus of the present road, to the Shoshone Geyser Basin; thence around the southern shore of Shoshone Lake and across the continental divide to the west arm of the Yellowstone Lake; thence along the western shore of Yellowstone Lake to lake outlet, and along the Yellowstone to the

Falls and Grand Cañon. From the falls the road will be continued down the Yellowstone to a junction with the present road to Cook City, which will be improved from the point of junction to the Mammoth Hot Springs. It is also in contemplation to improve the present road from Mammoth Hot Springs to the Upper Geyser Basin throughout its length, and also the Beaver Cañon road from the Fire Hole to the western boundary of the Park. Although this scheme does not embrace all of the roads necessary or desirable in the Park, it will, when carried into effect, enable tourists to visit the principal objects of interest without discomfort, and without passing twice over the same road.

Owing to the shortness of the season in which labor can be profitably expended upon roads in this region, it is of the utmost importance that any appropriation made by Congress should be made available at the earliest possible date.

HOTEL ACCOMMODATIONS.

The hotel accommodations in the Park have in general been excellent. During the rush of visitors in the month of August the hotel managers at two or three points in the Park found some difficulty in providing for their numerous guests, but although some inconvenience by visitors may have been experienced, there was but little actual discomfort. A fine new hotel has been completed at the Norris Geyser Basin, and I am informed that before the next season it is the intention of the Yellowstone Park Association to erect one equally as spacious at the Grand Cañon.

It is to be hoped also, that the structures at the Lower and Upper Geyser Basins may soon be replaced by others more suitable for the accommodation of the increasing number of annual visitors.

TRANSPORTATION.

The transportation facilities have been adequate to the demands of travel. No serious accidents have occurred, and no complaints of incivility on the part of the drivers, or of extortion by the proprietors have been made. There have been during the season a large number of irresponsible persons doing business in the Park with saddle animals and pack outfits. These parties do not reside permanently in the Park but come in for the season.

In my opinion no persons should be allowed to do business of this character in the Park without first obtaining permission from the superintendent, and registering their names in his office.

A person so authorized to do business, or act as guide, should be furnished with a certificate to that effect, and the visiting public should be cautioned to do business with those parties only who are thus duly authorized.

The tariff of charges for transportation for all persons doing business in the Park should be uniform, and should include the charge per day for saddle and pack animals, and for all kinds of carriages in use.

LEASES.

As far as I am informed by the records of this office the following-described leases are the only ones now operative in the Park, viz: John F. Yancy, ten acres upon the mail route from Mammoth Hot Springs to Cook City, to be measured from the building now occupied by said Yancy as a central point. Helen S. Henderson and Walter J.

Henderson, ten acres of land at Mammoth Hot Springs. James A. Clark 4 acres of land at Mammoth Hot Springs. F. Jay Haynes 4 acres of land at Mammoth Hot Springs, and 4 acres at the Upper Geyser Basin. Charles Gibson four different sites in the Yellowstone National Park, containing seven acres in all. No. 1 at Mammoth Hot Springs, No. 2 at Norris Geyser Basin, No. 3 at the Grand Cañon of the Yellowstone, No. 4 at the Yellowstone Lake. All of the rights and privileges conferred by Mr. Gibson's lease appear to be exercised by a stock company known as the Yellowstone Park Association. Mr. Gibson has executed an instrument transferring the lease to this company, and the paper was forwarded for the approval of the honorable Secretary of the Interior through this office, September 15, 1886. The Park Association has carried on the business of hotel keeping during the past season at the following points in the Park, viz: Mammoth Hot Springs, Norris Geyser Basin, Grand Cañon of the Yellowstone, Fire Hole, or Lower Geyser Basin, and Upper Geyser Basin.

At none of these points are the buildings occupied by the Park Association located upon land described in the leases. It appears that permission was granted by the Department, by telegraph June 10, 1886, to change the original location at Norris Geyser Basin subject to the approval of the Department, upon formal application by the lessee, with description of site selected. I am not informed whether or not this application has been made and approved. A good hotel has been erected upon the new site, and it appears to be well located.

It appears by a letter from the Department, on file in this office, dated May 27, 1886, that permission was granted Mr. Gibson to erect a temporary building to be used for hotel purposes at the Grand Cañon of the Yellowstone, with the understanding that it should be removed on or before the 1st day of August, 1886. This building has not yet been removed, nor has the erection of the permanent building at that point been commenced.

At the Fire Hole, or Lower Geyser Basin, there are three buildings occupied by the Park Association, a hotel building of limited capacity and rude construction, and two cottages used in connection with it. A piece of ground at this place, four acres in extent, was leased to G. W. Marshall in January, 1884. A half interest was subsequently transferred to one Henderson, and I believe several sales and transfers of this lease have since been made without the authority of the Department. It is presumed that the Park Association are occupying the buildings at this point under the color of this lease. I am unable to state by what process it came into possession.

The company is also occupying a hotel building at the Upper Geyser Basin, which, I believe, was originally erected by the Park Improvement Company. This building is less than one-fourth of a mile from the Old Faithful Geyser, contrary to the provisions of the act of March 3, 1883. The hotels of the Park Association at these points have been of unmixed benefit to the public, and the accommodations they have afforded have enabled many visitors to enjoy the wonderful objects in their vicinity who would otherwise have been unable to do so; but it is recommended that if this company is to continue to occupy these sites that it be required to have them accurately surveyed, and that leases be applied for and taken out in proper form. The remaining lease holders in the Park have, so far as I am informed, complied with the requirements of their leases.

RULES AND REGULATIONS.

The only rules and regulations of the Park which have received the approval of the Department are those bearing date of May 4, 1881, as amended by Secretary Teller, January 15, 1883.

These regulations are no longer applicable under the changed conditions in the Park. Probably for this reason they have not been posted in the Park or generally published. Various rules have been, from time to time, established by the superintendent, but they have not been so published or posted as to be generally known, and their enforcement has consequently been difficult. I have prepared certain rules and regulations which appear to me proper and necessary, and submit them herewith (paper inclosed and marked B) for the consideration of the Department. If approved, I recommend that 1,000 copies be printed on muslin and forwarded in time to be posted throughout the Park before the next season for visitors opens. The enforcement of these rules and regulations will be difficult until some more effective penalty for their infringement is provided than expulsion from the Park.

The necessity of a form of government for the National Park is becoming, year by year, more urgent, as the number of visitors to the Park increases. All sorts of worthless and disreputable characters are attracted here by the impunity afforded by the absence of law and courts of justice. Evanston, the county seat of Uinta County, Wyoming, more than 250 miles distant, with a rugged and mountainous region intervening, is the nearest point at which even a justice of the peace with the necessary jurisdiction can be found.

This subject has been so frequently brought to the attention of the Department, and of Congress, that any recommendation from me would seem superfluous.

In the preparation of the estimate of appropriations required for the Yellowstone National Park for the fiscal year ending June 30, 1888, I have assumed that the civil administration of the affairs of the Park would be continued, and have estimated for the pay of a superintendent and a sufficient number of assistants to insure some effective protection to the Park. The amount included in these items may, in view of previous appropriations for this purpose, appear excessive, but after giving the subject careful consideration, I am of the opinion that a less amount would be inadequate to the end in view.

I have also included in this estimate the necessary amounts for a suitable residence and office for the superintendent and for the purchase and keeping of such animals as will be necessary to replace those which have been ordered sold because no fund is available from which they can be subsisted.

I am, sir, very respectfully, your obedient servant,

MOSES HARRIS,

Captain First Cavalry, Acting Superintendent.

The SECRETARY OF THE INTERIOR.

REPORT

OF

THE POSTMASTER-GENERAL.

POST-OFFICE DEPARTMENT,
Washington, D. C., November 13, 1886.

SIR: In the following report of this Department for the fiscal year ended with June last, I respectfully present you a general account of the postal service during the year, and of its present condition—the more particular details of which will be found in the documents appended—together with a summary of its financial affairs; interspersed with such comparisons and observations as may tend to show the progress made, and the probable requirements of the future, and accompanied with a discussion of such special topics and such recommendations of legislation as are deemed sufficiently important to be brought to your consideration.

The International Bureau of the Universal Postal Union has recently collected and published statistics of postal administration by most of the civilized countries of the earth. These do not extend to a later period than the year 1884, since when every feature of our service has expanded in the rapid ratio of our national growth; yet they disclose with sufficient completeness the interesting fact that in immensity and extent of means, of expenditures, of performances and results, the postal machinery of the United States exceeds—in some points far exceeds—that of any other nation on the globe. In an appendix to this report the figures of this comparison will be found, tabulated by the Superintendent of Foreign Mails from the publications mentioned.

The entire length of all railways employed by the United States nearly equals the combined extent of those of all other countries of the world, while the other post-routes more than quadruple the total of any single people besides; and, by the latest reports received, the mileage last year of our mail transportation exceeded by more than 125,000,000 miles the service rendered to any other government. Of post-offices no other nation has one-third our number; a marked feature of advantage to our people and of liberality in policy. We expend annually more money than any other to maintain postal facilities, and, if the

postal telegraph service be excluded from the reckoning, we derive a greater revenue. At the same time, no service is maintained at more economy of expenditure for results. No statistical account is maintained in the United States of the quantity, in weight or number of pieces, of our domestic mails; but, from the number of postal cards, stamps, and pieces of stamped paper sold to the public, it may be unquestionably affirmed that the mail matter handled by our postal service greatly outweighs and outnumbered that of any other postal system. Trustworthy estimates place the number of letters mailed during last year at 100,000,000 more than were mailed in Great Britain, long the leading letter-writing nation, and nearly that number more than were mailed in Germany, France, and Austria combined. Excluding Germany, it is thought all other Postal Union countries do not together carry so many newspapers in their mails as did ours last year. Of all pieces of matter mailed, the proportion to each inhabitant of the United States is estimated at 66, of Great Britain at 57, of Germany at 19.

The rate of assessment imposed for the maintenance of our service bears a similarly gratifying comparison with that of other lands. Except in Great Britain, the unit of weight for letter postage remains elsewhere at the half ounce, and, with perhaps one exception, the lowest rate at the equivalent of two cents; and although the British rate of a penny an ounce substantially corresponds to our present charge of two cents, nominally, yet the average of distances over which the mails of the United States are transported exceeds by so many times the average of distances in the United Kingdom that upon the whole contrast the American postage is the cheaper.

Other countries have adjoined to postal administration auxiliary conveniences and systems, such as the telegraph, savings banks, the parcels post, the collection of moderate sums of money, or the special handling of letters of declared value, some of which might perhaps be grafted usefully upon ours; but in the essential features of the postal service the statistical comparison furnished by the International Bureau and other sources exhibits undeniably the superior magnitude which that of the Republic has already attained.

It will appear also from the particulars now to be presented that the law of our increase maintains an undiminished strength; that all the elements of extent and usefulness have augmented since the year upon which the Bureau statistics are based; and that a gratifying expectation for the future may be prudently indulged.

POST-OFFICES AND POSTMASTERS.

When the fiscal year 1886 closed, the post-offices of the United States numbered 53,614, besides 497 branch offices or stations. By advancements at the quarter-yearly periods, upon the showing of their returns, 32 offices had been, during the year, added to the Presidential list, bringing the number in the last three months to 2,265. But the annual review

and readjustment, which took effect on the 1st of July, relegated 43 third-class offices to the fourth class, while at the same time but 24 of the latter were advanced. Thus the number of Presidential offices with which the current year began was 2,244, a gain of 11; of these, 75 of the first class, a gain of 4; 400 of the second class, a gain of 17; and 1,769 of the third class, a loss of 10 as compared with the beginning of the late year. The branch offices are auxiliary to the large city offices, and of these 357 are only for the sale of stamps and stamped paper; 44 others are also registry offices, 25 more are both registry and money-order stations as well, and 71 more are carrier stations in addition, only 4 of which are not also money-order stations, all being registry offices. Some of these branches are equipped post-offices, with a superintendent instead of a postmaster, requiring the renting of apartments and clerical allowances; but the greater number of these stations are maintained at very small outlay.

In the fourth class, comprising on the 1st of July 51,370 offices, there was a gain of 2,351, the new establishments having been 3,482, those discontinued 1,120, and 11 become Presidential. The increase in the number of establishments over the previous year was 1,361, chiefly arising from the disposition of applications for new offices, which had accumulated in the office during the year before for want of action, a condition indicated in the last annual report by the large decrease, 1,293 in number, of establishments then reported, as contrasted with the year ended June 30, 1884. The number discontinued during the past year also increased by 234 over the preceding.

It has ever been the policy of the Department to promptly provide the pioneers of new settlements with postal conveniences; and it not infrequently happens that the changed conditions which follow rapid development render discontinuance of the earlier offices, and the creation of others elsewhere, more expedient afterwards. Other causes, also, combine to give but brief duration to many small offices, and some are established designedly for temporary service, as in connection with summer resorts, or to accommodate a numerous body of workmen engaged for a time upon some protracted undertaking beyond convenient access to a post-office.

By the increase in offices the New England states gained 50; the five Middle states, with the District of Columbia, 261; fourteen Southern states and the Indian territory, 1,444; the three states and three territories on the Pacific slope, 106; the Western states and territories, 501. As in the preceding year, Virginia required the largest number of new offices, being 238, with 41 discontinuances, while Colorado sustained the greatest diminution, 45 having been discontinued to but 2 established.

Among all the post-offices, 7,265 were at the end of June money-order offices, besides 92 money-order stations. The tables prepared in the

appointment division and annexed to the First Assistant's report exhibit in detail the various changes effected during the year in each of the states and territories.

It may prove a convenience if there be added here the result of changes since the beginning of the current year, prior to this report. On the 1st of October the total number of post-offices had become 54,157, of which 51,866 were of the fourth class and 2,291 Presidential; the latter standing 75 in the first, 400 in the second, and 1,816 in the third class. Adding the stations, the total number was 54,654. On the same date the number of money-order offices and stations reached 7,863.

The Appointments of postmasters during the last fiscal year numbered altogether 22,747; of which 9,112 were made to fill vacancies occasioned by resignations or expired commissions, 587 to vacancies caused by death, 3,482 on the establishment of new offices, and 9,566 upon removals. Of the total number of appointments, 1,039 were made by yourself, the vacancies having occurred from the following causes, respectively, viz: By expiration of commission, 468; by resignations, 253; by death, 24; by removals or suspensions, 247; and to offices which had been assigned from the fourth to the third class, 47. The following table, prepared in the Appointment Division, displays in convenient arrangement for comparison the statistics of appointments for the past nineteen years:

Statement of postmasters appointed during each fiscal year between June 30, 1868, and June 30, 1886, with number of post-offices in operation at the end of each fiscal year mentioned, as well as the number discontinued each year.

	For the year ended June 30—								
	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.
Number of post-offices established	2,167	1,883	2,350	2,407	2,703	2,462	2,318	2,313	1,993
Number of post-offices discontinued	849	1,028	962	854	885	1,081	1,268	1,060	1,187
Total number remaining in operation	26,481	27,106	28,492	30,045	31,863	33,244	34,294	35,547	36,393
Appointments on resignations and commissions expired	4,021	3,904	4,105	4,307	4,091	4,802	5,354	6,017	5,140
Appointments on removals and suspensions	1,194	2,691	1,449	1,179	939	945	907	974	1,045
Appointments on changes of names and sites	187	106	204	178	199	178	477	187	251
Appointments on deaths of postmasters	267	230	293	309	328	386	308	380	333

	For the year ended June 30—									
	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Number of post-offices established ..	1,825	2,784	2,676	3,462	2,915	3,106	3,253	3,414	2,121	2,493
Number of post-offices discontinued ..	863	871	1,079	1,328	1,415	1,447	1,621	1,290	886	1,120
Total number remaining in operation ..	37,345	39,258	40,855	43,012	44,512	46,211	47,863	50,017	51,261	53,814
Appointments on resignations and commissions expired	4,800	5,117	5,627	6,332	6,317	7,840	7,734	7,265	6,204	5,112
Appointments on removals and suspensions	711	748	558	561	958	1,021	705	513	810	9,586
Appointments on changes of names and sites	216	184	187	690	242	349	342	234	207	463
Appointments on deaths of postmasters	397	338	278	356	421	461	468	477	412	587

The Compensation of Postmasters, a subject which has been productive of many changes in legislation, is, under the act of March 3, 1883, now regulated by awarding fixed salaries to those of Presidential appointment, who are therein divided into three classes, and to all others their box-rents and commissions upon the business of their offices.

The salaries of first, second, and third class postmasters are fixed, annually, by the Department, in the Division of Salaries and Allowances, upon a review of their reported transactions. The compensation to postmasters of the fourth class is computed by the Auditor of the Treasury for the Post-Office Department upon their returns (except where in case of false returns the Postmaster-General otherwise orders), and credited in settlement of their accounts; not to exceed \$250, however, in any one quarter. When their box-rents and commissions, exclusive of money-order business, are found to yield the full \$250 during each of four consecutive quarters, and the returns show the postmaster entitled to more than \$250 per quarter, the Auditor reports the facts to the Department, which adjusts the salary and assigns the office to the proper class; almost invariably the third. And, on the other hand, when upon the annual review and readjustment of salaries it appears that the gross receipts of any office have become less than \$1,900 per year, the office is relegated to the fourth class, and goes back to the Auditor for adjustment of compensation. Thus, offices may become Presidential at the end of any quarter; but a Presidential office can fall to the fourth class only at the beginning of a fiscal year, the period when the annual adjustment takes effect.

The method of graduating salaries prescribed by the act of 1883, though open to some improvement, appears more just and satisfactory than any preceding, and the annual review obviates the undue continuance of a disproportionate outgrowth of business to the fixed compensation, occasionally suffered under the biennial system.

It imposes important and laborious duty on the division. In the past year the annual adjustment, made wholly after the returns of March 31 were received, required review of 2,328 offices, the largest of the country, and involved salary claims amounting to \$3,796,375. The total salaries of the 2,244 Presidential postmasters on the 1st of July aggregated \$3,685,500, as against \$3,630,600 the year previous. The net increase of \$54,900 was reached by changes which may be summarized thus:

Aggregate increase made in 599 offices.....	\$70,300
Total salaries of 57 offices becoming Presidential since July 1, 1885.....	61,000
Aggregate increase.....	131,300
Salary of one Presidential office discontinued during year.....	\$1,600
Salaries of 45 of third class reduced to fourth, July 1, 1886.....	43,600
Combined reductions of salary in 240 other offices.....	22,200
	75,100
Net total of increases	54,900

This increase in salaries is one of the many marks which the statistics of the service afford of the country's business gain during the year; especially in the larger offices, where the addition of a hundred in salary signifies thousands gained in gross receipts.

A like indication of continuing growth is furnished by the fact that, on the 1st of October, 47 more fourth-class offices became Presidential, with salaries aggregating \$49,100; whereby the annual rate of compensation to Presidential postmasters at date of report has become \$3,734,600.

Various evidences of continuing growth in the volume of postal business promise considerable additions at the expiration of each successive quarter of the current year.

Compensation to fourth-class postmasters, although ultimately reviewed and allowed by the Auditor, is, in the first place, reckoned by themselves and retained out of their receipts. Their commissions, since the act of June 17, 1878, are not computable upon the revenues of their offices,—except upon such as arise from sales of wastage and unpaid postages collected, rarely exceeding a moderate sum—but upon the amount of stamps and stamped paper “cancelled as postages on matter actually mailed at their offices.” Their sworn quarterly returns must exhibit not only the revenues of their offices, but, separately, the amount of their cancellations, of which a daily record from actual count is required. The Auditor's review is based upon these returns.

The changes of postmasters during the eighteen months past have contributed to disclose the fact that many violations of the law have been practiced, and illegally excessive compensation has too often been retained. As the quarterly returns of the newly appointed officers were received from time to time, the cancellations claimed by them were perceived in many instances to be significantly less than those returned by their predecessors; upon which examinations by inspectors were ordered, resulting often in evidence that the returns of the former incumbents had exaggerated the amounts cancelled, sometimes grossly and fraudulently. The cancellations of comparatively few fourth-class offices are equal to their receipts from sales, which for the most part exceed the former by 12 to 25 per centum; from various causes, but perhaps chiefly the use of stamps as a means of transmitting small sums of money from the country to the towns. Whether from a recognition of this, or from indifference to the requirements of the law, the illegal course has been occasionally pursued of omitting to keep, or concealing, if kept, the daily count and record of actual cancellations, and making returns instead of sums equivalent, or approximately equivalent, to the quarter's receipts from sales. By such means commissions have been illegally swollen, and in the total a considerable loss caused to the Government. Besides such illegitimate gains, other postmasters have also disposed of stamps in private dealing, as in payment for small purchases of goods, or even worse, and thus enlarged their returns of revenue under

cover of which their false returns of cancellations have carried a more specious appearance, and a compensation often several times the just amount has been illegally retained.

The act of 1878, besides denouncing penalties against such perpetrators, imposes a discretionary duty upon the head of the Department, when "satisfied that a postmaster has made a false return of business . . . to withhold commissions upon such returns and to allow any compensation that, under the circumstances, he may deem reasonable." When attention is once directed to a particular office, it is not difficult to determine whether returns have been true or false, and measures may be taken which will ascertain with approximate correctness the cancellations actually made there. Accordingly many cases in which, by various indication or information, suspicion was excited, have been investigated by inspectors; and upon the evidence secured—occasionally accompanied by written confessions—where the facts have required it, commissions have been withheld and compensation fixed at a reasonable figure. The number of such orders within the last fiscal year and thenceforward to the 10th of October was 172, and the aggregate difference between commissions claimed and compensation allowed, or the amount reclaimed by the Government as wrongfully taken, including some disallowed rents, has reached \$78,575.60. In some instances the reclamation has been large; in one case \$4,225.15, and in twenty-four cases above \$1,000. Arrests of sixteen postmasters have been made, whose fraudulent intent seemed legally provable and inexcusable; of whom seven pleaded guilty, one was convicted on trial, one acquitted, four await trial, and three action by the grand jury. Three or four hundred cases are undergoing investigation, and others will doubtless be found requiring it, as the examination of returns by the Auditor's office, necessarily a protracted labor, discloses indications of probable irregularities.

Ignorance of the methods which duty imposed is commonly pleaded by postmasters who acknowledge the incorrectness of their returns, and, I am persuaded, sometimes truthfully. To correct misunderstanding and warn the conscious, as well as to acquire information aiding the detection of offenders, a circular was issued in May last directing the attention of postmasters to the law and the illegal violations of it, with the consequences denounced, and that information be furnished the Department of any suspected case.

The accumulating evidences leave little reason to doubt that the practice of making false returns has been pursued by some postmasters almost since the enactment of the statute of 1878; that it has been a growing and spreading fault, embracing larger numbers as years have passed, inducing the fraudulent sale of stamps to give a specious cover by larger reported sales to the falsely reported cancellations, and causing considerable annual loss to the Department. It is thought that a noticeable effect has been already produced upon the revenues from

sales at Presidential offices, as well as upon the expense item of compensation to fourth-class offices, by the changes of postmasters during the year and the action of the Department. The Auditor shows a percentage of decrease in the aggregate reported sales by fourth-class offices, with a diminishing percentage of compensation, during the later period of the last year, notwithstanding a generally improving business condition and very marked increase at the same time in the sales at the Presidential offices—a result deemed attributable, in part at least, to the cessation or diminution of illegal dispositions of stamps in certain small offices by sending them to the towns for sale.

The readjustment of salaries of postmasters of the third, fourth and fifth classes for the ten years following July 1, 1864, in pursuance of the direction of the act of March 3, 1883, and the consideration of claims for unpaid salary during that period, has imposed such excessive labor on the division that for the current year, as well as the past two years, an additional force of clerks has been provided. Applications to the number of 49,851 have been received, of which 28,418 have been passed on, 10,763 allowed, and 17,655 rejected. The gross amount of claims allowed to the end of the year was \$615,479.96, and three deficiency appropriations aggregating \$603,904.49 have been made. The last of these is now nearly disbursed.

It is hoped that the various contentions concerning the proper interpretation of the statutes and the procedure of the Department have been laid at rest by the action of the Congress at the last session, in ratifying the methods and adjudications of the Department, and requiring all further claims to be presented during this calendar year. The additional clerks employed for three years, or the greater number of them, can be dispensed with at the end of this fiscal year.

Supplies to Postmasters of the first and second classes are made of twine, wrapping paper, stationery, letter balances, and scales, and to postmasters of all classes, of blanks, canceling-ink, marking and rating stamps and stamping pads, through the division of Post-Office Supplies, which embraces the so-called blank agency. This division also serves to provide the Department with stationery and the Railway Mail Service with twine, marking and rating stamps and pads, and wrapping and facing slip paper. The work necessarily performed in making such provision for the service is manifested in the figures for the past year. Nearly 58,000,000 blanks, 121,000,000 facing slips, over 125,000 record books, 836,000 pounds of twine, nearly 21,000 reams of wrapping paper were procured and issued for use in every quarter of the country.

This division of the Department underwent an investigation in April and May, 1885, the results of which were laid before you in the report of last year, exhibiting many serious irregularities and arousing the suspicion of speculation. The changes in its methods which were then and since made have been advantageous to the service, and corrob-

rative by results of the inferences of that investigation. Notwithstanding an addition, required by the growth of the service, of over 35,000 record books, over 55,000 facing-slips, over 3,500 reams of wrapping paper, and of 11,100 pounds of ink and 5,475 ink-pads in the purchases and issues of the year, the total expenditures under the five items of appropriation in the postal-service act—for paper, twine, balances and scales, stamps and ink, and stationery—which embrace all the charges of the division except printing at the Government Printing Office, amounted to but \$153,465 during the last fiscal year, as against \$189,097.40 in the previous year, or a saving in expenditure of nearly 19 per centum, while there was almost an equal percentage of increase in the quantities of goods supplied.

In the comparison of the quantities of twine issued during the two past years, the value of the change in methods is very manifest. It was discovered by the investigation mentioned that the twine which had been accepted was deficient in yardage to the pound, but the extent of loss inflicted on the Government was only to be conjectured. It transpires that owing to the care taken to secure the stipulated article during the past year, the amount required for use was many thousand pounds less than the quantity paid for the year before, notwithstanding the increased necessities of the service; and the division superintendent estimates the actual saving accomplished at 140,000 pounds, which would have cost \$11,600.

There remains a balance of these appropriations unexpended of nearly 32 per cent., and the experience of the year will justify some reduction in the appropriations for these articles of supply, even beyond the reductions already made in those for the current year.

The economy of supplying post-offices from the Department with articles the cost of which constitutes a proper charge upon the Government, instead of leaving them to be purchased by postmasters and charged to their accounts, as was formerly done, has become so obvious that the system deserves extension to embrace every sort of such supply. It affords the opportunity for judicious purchase in large quantities from competing manufacturers, as well as of careful inspection, and secures both prices and goods much better than postmasters could be expected individually to obtain.

Since the 1st day of July, 1885, under the legislation of 1878 and subsequent appropriation acts, postmasters of the third and fourth classes have been considered entitled to supplies of ink, stamping-pads and stamps, but have made few requisitions for such articles, either because their previously procured supplies have served or from ignorance of the extended privileges provided. The statute on this subject is not free from uncertainty, and a more definitive expression of the legislative purpose is desirable.

Allowances to Postmasters in money—for rent of offices, for furniture in them, for fuel and light, for clerks, and for miscellaneous

and incidental expenses—are made for offices of the first and second classes only; with the two exceptions that when any of the third or fourth class are designated as separating or distributing offices, the additional clerical service so caused is a Department charge, and that authority exists to allow specially for clerical service “whenever *unusual* business accrues at any post-office.” These allowances are made through the Division of Salaries and Allowances, and are to be distinguished from “supplies” furnished in kind.

There has been much complaint, not, it seems to me, without some reason, that these limitations in the statute operate an unfair discrimination against some postmasters below the second class, and I shall submit some observations on the subject, before the close of this report, for your consideration. Reference is made to the tabulated statements of the operations of the Salary and Allowance Division, presented in the report of the First Assistant, for a summary of the work performed, without particular recapitulation.

The rent, fuel and light of first and second class offices not in buildings belonging to the Government (in which case the Treasury Department makes provision for them) cost during the last fiscal year altogether \$468,932.57. The appropriation was \$490,000.

In some cases the office is rented by the postmaster, and the allowance is made to him for the amount. In general, however, it has been the policy to effect leases for a term of years, and require the owner of the property to provide all the furniture and fixtures necessary, with an engagement to make such repairs and further provision as increase of service may require. Whenever it has appeared advantageous, the additional stipulation has been inserted that heat and light shall be provided by the lessor. It sometimes lies in his power to furnish both at less cost than the Department can independently supply them.

Proposals for such leases are solicited by inspectors, who report the circumstances affecting choice, and the cases are prepared by the law clerk, leaving final decision and consummation of the contract, often at the end of much contention among competing owners or local parties, to the head of the Department.

Appended hereto is a statement of the leases of post-offices and postal stations as they existed on the 25th of September last, arranged by states, and showing their date, duration, and annual rental, together with the character and business status of the respective offices. The entire number of such leases at that date was 266 for post-offices and 38 for postal stations, at an annual rental of \$319,671.50. The highest rent paid is for the Brooklyn office, \$7,500; while many are leased for \$1, where competition between different sites has induced such propositions. No proportionable uniformity in rentals is even approximately possible, being dependent upon local conditions exceedingly variant.

The act of March 3, 1885, authorized leases to be made for a period of five years, but its terms limited the power to those negotiated during

the late fiscal year. Such authority is desirable, because no owner can be reasonably asked to fit up a post-office for a single year's use, and although the practice of leasing for five years, subject to appropriation, is continued, the legislation would add to confidence and tend to better the terms.

The act last mentioned also gave discretionary power to lease third-class offices, but inasmuch as no increased appropriation was given, the authority could only be exerted where leases were offered at a nominal rental with a view to securing a fixed location. Six such cases will be found embraced in the appended statement. That authority also lapsed with the expiration of the year.

Clerical Service in post-offices requires the largest allowances, and the ascertainment and defense of their proper limits impose much labor and trouble. The gross expenditure authorized on this account during the past year, in 3,412 cases favorably considered, was \$5,029,448.06, and 1,727 applications were declined.

Of this sum the first and second class offices took \$4,536,877.06, and the residue was allowed to certain of those in the third and fourth classes which had been designated as separating or distributing offices, for the additional clerical labor imposed by that service. The number of such third-class offices is 1,175, and their aggregate allowance \$355,109, the maximum being \$1,710 (to the office at Suspension Bridge, N. Y., an important international exchange office) and the minimum \$45, the average \$302.22. The number of such fourth-class offices is 1,078, their aggregate allowances \$137,462, the maximum \$720, minimum \$20, and average \$127.50.

The allowances to first and second class offices have been made upon the reports of inspectors and such information as has been presented. Undoubtedly differences must exist between different offices, which will affect the measure of allowances. But, generally, it is believed a graduated scale can be established by which the expenses for clerk-hire might be apportioned upon the business done, subject to special provision in exceptional cases, with economy to the Government and equity between postmasters.

The actual expenditure, as shown by the Auditor, was but \$4,977,663.47, being somewhat less in fact than the total authorized during the year.

Postmasters' Claims for Losses "of money-order funds, postage-stamps, stamped envelopes, newspaper wrappers, and postal cards," resulting from burglary, fire, or other unavoidable casualty, including remittances of money-order funds lost or stolen while in transit, were authorized by the act of March 17, 1882, to be allowed by the Postmaster-General upon his determination of the facts, and that "such loss resulted from no fault or negligence on the part of such postmasters," with a limitation that claims thereafter accruing must be presented within three months of the loss.

The Assistant Attorney-General of the Department, under whose direction all such claims are investigated, and by whose opinion, in submitting them, their determination is mainly guided, reports fully upon the claims adjudged during the year. His report, with accompanying tables, will be found in the appendix.

The number of claims decided during the year was 602, and of these 458 were allowed in whole or in part, and 144 denied. His tables show the general features of each case, the post-office, postmaster, date, amounts claimed and allowed, character of funds, and the reasons for disallowance where that was the event.

The gross amount allowed was \$28,387.21, of which \$5,123.98 were for money-order funds and \$23,263.23 for stamps and stamped paper. These losses were caused, respectively, by fire, \$11,460.54; by burglary, \$14,924.80; by storm and flood, \$17.15; and by thefts and otherwise of funds in transit, \$1,984.72.

The total amount of the claims made upon the Department in these cases was \$29,900.53, of which \$1,513.32 were disallowed, leaving the total losses to be as stated. To the extent, of course, that these resulted from destruction of stamps or stamped paper, at least \$11,258.34, the Government suffered only the insignificant injury of the cost of manufacture; and the net actual loss was doubtless somewhat below the remaining \$17,128.87 of the allowances.

The gross sum of the claims denied entirely was \$8,443.51, of which \$4,823.74 were for money-order funds and \$3,619.77 for stamps and stamped paper. The disproportionate disallowance of claims for lost money-order funds arose from the too frequent breach of section 1081 of the Postal Laws and Regulations of 1879. This requires a *daily* remittance of "surplus" money-order funds, and losses of such funds retained in a post-office contrary to this requirement are deemed to be sustained by the postmaster's fault. His detention of the money beyond the prescribed time is at his own risk, as well as otherwise reprehensible. Another not infrequent disregard of that regulation has imposed occasional loss on postmasters. Certain formalities in recording the character of money remitted and in providing proof of its dispatch are prescribed, the omission of which imposes the loss on the sender. Some instances of severe misfortune have been published as a monition to pursue the steps required by the regulation.

Summarizing the reasons for denial of the 144 claims mentioned, 31 were not presented in time, 39 were due in part to the postmasters' neglect, 37 were not satisfactorily proven, 18 were not within the provisions of the statute, and in 19 cases the lost money or property was recovered by the inspectors of the Department.

Safes were opened by burglars in 110 cases, and the money, stamps, &c., abstracted.

A comparison between the two last fiscal years shows the total amounts allowed to be, respectively, in 1885, \$28,377.79, in 1886,

\$28,387.21; and of claims disallowed, in 1885, \$12,092.97, in 1886, \$3,443.51. The general statement of the sums awarded to claimants during the several years since the passage of the act, which the Assistant Attorney-General presents, would indicate a diminution in the extent of these casualties; but the greater amounts of the first two years are rather due to the fact that many claims had accumulated in Congress before the statute was enacted for the relief of claimants, which, on its passage, were granted.

The present limitation of three months works occasional injustice; and although but a short period should be afforded, it is believed six months would be more consonant with justice.

The Free-Delivery Service by carriers was, during the last year, extended to three cities, Anrora, Ill., Duluth, Minn., and Newport, Ky., making on the 30th of June, 1886, 181 free-delivery offices in all. The limits imposed by law on the discretion of the Department in extending the system have nearly been reached, and unless they be expanded the addition of other communities to the enjoyment of the privileges of the system will be few, as, from year to year, they gradually attain to the population or volume of business now required.

The statistics show the continued enlargement of the machinery, performances, and cost of the service, but only in the general ratio of postal progress in recent years. Of carriers, there was an increase of 483, giving a total number of 4,841. The cost rose by the amount of \$326,354.15, or 8.18 per cent., to a total sum of \$4,312,306.70. This, however, was over \$220,000 less than the estimates of the Department, and within the appropriation of \$4,485,000 by \$172,693.30. Considerable part of this unexpended balance results from the changes made in carriers at various offices, the newly-appointed being required to enter at a lower grade of salary than was often paid to those displaced, while the estimates were based upon the rates of pay of those in the service when they were made.

The number of pieces of mail matter, counting collections and deliveries, handled by the carriers during the year, was 1,949,520,599, an increase over the previous year of 204,983,186, or 11.75 per cent., while the carriers increased but 11.08 per cent. in number.

The average number of pieces handled by each carrier was 402,710, a gain of 2,403, or $\frac{1}{40}$ of 1 per cent. The average cost per piece was 2.2 mills, as against 2.3 the year before, a gain of one-tenth of a mill; and the average cost per carrier was but \$889.15, as against \$912.90, a diminishment of \$23.75, or 2.6 per cent. This was due in part to the increased number of carriers in the lower grades, already mentioned, and in part to the increased efficiency in work shown by the greater average number handled by the individual carrier.

The amount of postage on local matter is reported at \$5,839,242.97, an increase of \$558,519.87, or 10.57 per cent., on the previous year; while

the excess of such postages over the cost of the service was \$1,526,936.27, a gain of \$232,165.72, or 17.93 per cent.

At only nineteen offices the receipts from local postage exceeded the cost of this service; but at those the excess was sufficient to overbalance the deficiency of all the rest by the amount stated. There was in most of the free-delivery offices a better showing in this feature.

The Recommendation in the last annual report for the extension of the discretionary limitations of this service to places of 10,000 inhabitants or \$10,000 of gross annual revenue, I respectfully renew. The argument in its favor I will not repeat, as little need be said in addition to what was then presented, to one who favors the bestowal of the utmost feasible privileges to our citizens. It would not be necessary, nor proper, at once to extend to all cities and towns within such limits; not all will at once desire it, or meet the local conditions which the regulations and the principles of this service require. But the law should be altered so that no amendment will be again required in this respect for many years; and a sufficient curb on the exercise of the discretion can be annually imposed by the Congress through the usual limitation of the portion of the appropriation left applicable to extension.

The opinion expressed in the last report that a separate grade of collection carriers should be established, for use in the larger cities, at lower rates of annual pay than are given the delivery carriers, has ripened, in my mind, to a conviction that efficiency and economy would both be promoted by the measure. The work of collection requires little experience and carriers of little education. It would afford employment to many who cannot now enter the service at all. The division of the labor is in accordance with the soundest principles of organization and would doubtless advance the measure of performance to means and cost.

It is suggested also that the statute which forbids placing collection boxes in any but public buildings or railroad stations should be modified. It is now customary to construct in the cities private buildings of large size and great height for business purposes, of such capacity that a colony of business men may occupy one. A convenient device is often supplied to these by which mail matter deposited in the several stories in a common pipe or tube will drop to a letter box on the ground floor. By this means such a letter box oftentimes serves more persons than one upon a street corner and with equal security, and such provision is, or can be made, in all cases, that it is as conveniently accessible to collectors. It would be an additional facility extended by the postal service to business men to authorize such boxes to be constructed, without cost to the Government, and embraced within the collection service, under control of the local post-office.

The Money-Order System has been conducted during the past year in accordance with its well-established methods and with customary efficiency. It was extended to 311 additional post-offices, while

but 10 were dropped from its list. The returning business activity has shown its marks here by an increase in the number of orders and postal notes issued and paid, slightly exceeding 9 per cent. on the whole; the gain on domestic orders, however, being less than 3 per cent., while in postal notes it was nearly 19 per cent., and in international orders nearly 10 per cent. of issues, though but 3.35 in those paid. Yet, notwithstanding the increase in number, the total value of domestic orders, both in issues and payments, diminished by a little more than \$4,000,000, or nearly 3½ per cent.; while the gross amount of postal notes, both those issued and those paid, increased by over \$1,700,000. This difference was due to a continuance of the tendency, noted the year before, to the use of orders for smaller sums; the average amount of the money-order having fallen by 93 cents from \$15.26 in 1885 to \$14.33, and of the postal note from \$1.98 to \$1.95.

The system was provided for those whose transactions are limited, and the scale of fees for the larger orders opens it to competition by the banks, express and telegraph companies, which it does not encounter on the smaller. The charges for orders of \$40, or more, exceed the rates which many banks require, and unless reduced will limit the employment of this means of transmitting money. So long, however, as it continues to furnish the best means for those whose dealings are but moderate, the system meets the chief objects of its creation, and its very great value to the people is shown by the large aggregate volume of its business.

During the past year there were issued 7,940,302 domestic orders, amounting to nearly \$114,000,000; 5,999,428 postal notes, amounting to \$11,718,000, and 493,423 international orders, aggregating \$7,178,736.21, besides the payment of foreign orders, reaching a total of almost \$4,000,000. The entire amount of fees received was \$1,214,506.38, less by \$2,860.60 than the previous year. There was some diminution in the fees from domestic orders, but a greater arose from the reduction of the charges on international money-orders from one and one-half to one per cent.

The total net revenue paid into the Treasury for the year was \$350,551.87, a sum more than sufficient to pay all cost of the money order clerical service in the Department and the Auditor's office, the rent of buildings and the maintenance of them, besides all incidental and miscellaneous expenses. The reduction in the fees on orders of five dollars and under by the Congress, pursuant to the recommendation in the last report, will somewhat further diminish the net revenue of the current year.

It is a gratifying proof of the efficiency which characterizes the management of this business that but 52 money-orders, or in the ratio of 1 to 152,618, were reported during the last year as erroneously paid; and of these a part proved on examination to have been properly paid, and for a part the inspectors recovered the money; so that during the year

but 29 orders, involving \$619.78, were charged to postmasters because of their fault, and but 2, amounting to \$65, were assumed by the Department.

On the 1st of October, 1885, the money-order business begun with Japan, under the convention reported last year. In November, 1885, I signed a convention for the exchange of money-orders with the Leeward Islands, which went into operation on the 1st of January last. Negotiations are in progress for an exchange between this country and The Netherlands, Norway, and Austria-Hungary, respectively, and it is probable will be concluded during the current year.

I concur in the hope expressed by the experienced superintendent that the bill which was passed by the House of Representatives at its late session, extending the convenience and usefulness of the postal-note system, may soon become a law.

The Special-Delivery Service was instituted under authority of the act of March 3, 1885, and put in operation on the 1st day of October, last year. The act limited the service to free-delivery offices and such others as served places with a population of 4,000 or more; and its privileges were thus operative at but 555 post-offices. The restriction greatly limited the convenience and employment of the service, because it required the sender of a letter to consult the list of offices where the stamp would be available, a list often inaccessible at the proper time. Nor was the stamp efficacious upon any but first-class matter. Notwithstanding, the public appears to have found the system advantageous, and during the full year of its use, to the end of September, 1,118,820 letters were received for special delivery at the designated offices, of which 785,020 came by mail and 333,800 were drop-letters. The large proportion of the latter seems an indication of the restraint on senders, just mentioned, from the want of ready knowledge of what offices were designated for special delivery. The Auditor reports sales of these stamps to the estimated amount of over 1,400,000 prior to the 30th of June, and the issues to postmasters to that date aggregate nearly 3,700,000.

Taking the full year of the system, the amount of fees paid for special delivery is put by the returns received at \$84,784.42, leaving a gross profit to the Government of \$27,097.58; figures approximately, though not nicely, accurate.

The service, to the extent it was employed by the public, has been well performed. The receipts of addressees give the hour and minute of delivery, as also the postmaster's note of the minute of dispatch from the post-office, and these show the average time between the office and the addressee to have been nineteen minutes. Another indication of efficiency is the insignificant number of complaints received.

The past year can be properly regarded as only affording a tentative experiment with the new system, with favorable indications. The present Congress, by the act of August 4th, gave power to make the

stamp available at any office and upon any article of mailable matter. Instructions were prepared and issued to all postmasters, and circulars of information to the public, and the enlarged system was put in operation on the 1st of October. The short period since passed allows but general information of the results. Confident assertion is therefore impossible; yet it may be properly said that all indications afford the promise that this auxiliary will much increase the usefulness of the service.

The Department will spare no pains to assure the public of promptitude and certainty in the delivery of matter properly stamped, and will co operate with public criticism to improve the efficiency of the system by the investigation of every complaint. Postmasters have everywhere manifested a praiseworthy zeal to promote its value, and as trial of its conveniences shall gradually extend knowledge of the various uses it will serve, its general and satisfactory employment may be reasonably anticipated. Practically it now affords the advantages of the parcels-post system for such articles as are admitted to the mail, and it may prove a precursor to the general introduction of that feature of postal service, now in use in several countries of Europe.

THE TRANSPORTATION OF THE MAILS.

Attention has been already called to the immensity of this part of our service, far exceeding in extent the similar establishment of any other country. The expense of its maintenance assumes corresponding proportions, rising above the combined sum of all other expenditures of the Department. On the 30th of June, 1885, the annual rate of cost of the entire transportation service was reported by the Second Assistant Postmaster-General to stand at \$28,285,081. But by contracts and orders previously made, to take effect on the 1st day of July, 1885, this rate was so changed that on that day, the beginning of the past fiscal year, it stood at \$28,955,898. Notwithstanding, the actual cash expenditure, as reported by the Auditor, has been but \$27,553,238.98, to which must be added a sum estimated not to exceed \$175,000 for railroad service unadjusted at the date of his report. Including that sum, the expenditures, as contrasted with the rates of cost in the several items at the beginning of the year, show as follows:

	Rate July 1, 1885.	Expended during year.
Railroad transportation, weight pay	\$15,197,053 00	\$14,124,15 00
Special facilities, &c.	251,725 82	251,725 82
Post-office rates	1,800,488 00	1,800,488 00
Post-office expenses	4,780,118 00	4,467,775 00
Steamboat transportation	5,019,000 00	5,111,414 30
Steamboat transportation	574,118 72	47,461 30
Mail messenger service	879,217 10	879,217 10
Mail equipments	208,007 00	208,007 00
	28,955,608 40	27,728,728 40

The various changes effected in the course of the year, by increase of service in different parts and by reduction of cost in others, left the annual rate of cost on the 1st of July, 1886, to stand as follows:

Railroad transportation, weight pay to the companies.	\$15,924,863 00
Special facilities	251,726 00
Railway Post-Office Service	1,916,321 00
Railway Mail Service	4,516,826 00
	<hr/>
	\$22,509,736 00
Star route transportation	5,091,225 28
Steamboat transportation	405,945 68
Mail Messenger Service	631,223 00
Add mail equipments at last years' cost	235,196 60
	<hr/>
	\$29,073,328 56

In Railroad Transportation, the annual rate of cost has increased from two causes: first, an increase of 2,901 in the number of miles of road employed, and, secondly, the increase in weights of matter shown by the quadrennial weighing in the Eastern section. Yet the increase was only at about half the rate per cent. of the previous year, although the increased mileage was over three-fourths as much, for the reason that applications for special weighings were generally refused. The practice of prompt adjustments has been pursued with good results. The following statement shows the changes in the extent and cost of the service from year to year since 1873.

Comparative statement showing total length of railroad routes; annual increase and annual percentage of increase in length of routes; annual rate and increase or decrease in rate of cost, and average annual rate of cost per mile for weight; annual increase or decrease in cost for railway post-office cars; total annual rate of cost and total annual average cost per mile for weight and railway post-office cars combined, from 1873 to 1886, inclusive.

Year.	Total length of routes.	Annual increase in length of routes.	Annual per cent. increase in length of routes.	Annual rate of cost for weight.	Annual increase in rate of cost for weight.	Annual per cent. increase in rate of cost for weight.	Annual decrease in rate of cost for weight.	Annual per cent. decrease in rate of cost for weight.	Annual average rate of cost per mile for weight.
	<i>Miles.</i>	<i>Miles.</i>							
1873	63,457	6,546	9.67	\$7,257,196	\$754,425	11.00	.....	.....	\$114 36
1874	67,784	4,277	6.74	9,113,100	1,855,994	25.57	.....	.....	134 54
1875	70,023	2,249	2.46	9,216,516	103,328	1.13	.....	.....	131 50
1876	72,348	2,325	2.23	9,543,134	326,616	3.54	.....	.....	131 90
1877	74,540	2,198	2.03	9,053,936	.....	.....	*\$439,189	*5.12	121 45
1878	77,120	2,574	3.45	9,566,595	512,659	5.66	.....	.....	124 04
1879	79,991	2,871	3.72	9,567,690	.....	.....	.....	.....	119 00
1880	80,320	3,329	6.66	9,237,945	.....	.....	.....	.....	108 27
1881	91,569	11,249	7.82	10,249,261	1,011,316	10.95	.....	.....	111 93
1882	100,563	8,994	9.82	11,297,313	1,048,072	10.23	.....	.....	112 34
1883	110,208	9,645	9.59	12,288,709	991,406	8.79	.....	.....	111 50
1884	117,460	7,252	6.20	12,273,866	984,807	8.01	.....	.....	113 20
1885	121,032	3,572	2.90	14,753,495	1,484,889	11.19	.....	.....	121 94
1886	123,933	2,901	2.39	15,620,191	761,096	5.16	.....	.....	125 23

* Caused by 10 per cent. reduction under act of July 12, 1876.

† Caused by 5 per cent. reduction under act of June 17, 1878.

‡ No separate appropriation was made for R. P. O. cars until fiscal year ended June 30, 1880, and, consequently, the accounts prior to that year for this service were combined with those for cost for weight of mails.

Comparative statement showing total length of railroad routes, &c.—Continued.

Year.	Annual rate of cost for R. P. O. cars.*	Annual increase in rate of cost for R. P. O. cars.	Annual per cent. increase in rate of cost for R. P. O. cars.	Annual decrease in rate of cost for R. P. O. cars.	Annual per cent. decrease in rate of cost for R. P. O. cars.	Total annual rate of cost for weight and R. P. O. cars combined.	Annual average rate of cost per mile for weight and R. P. O. cars combined.
1873						\$7,257,196	\$114 38
1874						9,113,196	134 54
1875						9,216,513	131 30
1876						9,543,134	131 00
1877						9,663,936	121 45
1878						9,566,585	124 04
1879						9,507,590	119 00
1880	\$1,261,041 00					10,498,966	122 05
1881	1,364,107 00	\$103,066	8.17			11,613,366	126 02
1882	1,455,851 00	91,744	6.73			12,753,184	126 51
1883	1,609,001 00	143,150	9.53			13,867,800	126 01
1884	1,738,997 00	139,996	8.76			15,012,603	126 13
1885	1,860,469 00	120,471	7.50			16,827,923	127 26
1886	1,818,321 00			\$53,167	2.84	17,326,513	126 05

* No separate appropriation for R. P. O. cars prior to 1880.

The appropriation for special facilities having been increased by the Congress at its last session with a view to increase the rapidity of transit to Tampa, Fla., and facilitate the Cuban service, arrangements were made accordingly to begin on the 8th day of August, since which time the northern mails have been delivered at Tampa in the evening of the day of their arrival at Jacksonville, instead of the afternoon of the following day as heretofore. The addition thereby of annual cost to this item is \$39,281.49. Otherwise the appropriation is disbursed in the same manner as last year, the particulars of which are stated in the appendix. There ought to be a still further reduction in the time between Washington and Tampa, so that arrival at the latter place of the mail train should not occur later than 3 o'clock in the afternoon of the second day from New York, enabling the mail steamer to reach Havana before sunset of the following day. It is believed this may be soon effected. Unless it shall be, continuance of this appropriation is of questionable expediency.

In the report of last year it was stated generally that an examination had shown me that for years extra payments had been made to some railroad companies for the use of apartments less than forty feet in length and in other than railway postal cars; that they were believed to be unwarranted by law, and that the Second Assistant had been directed to prepare a tabular statement of the facts, to be annexed as an exhibit to that report. That inquiry, when carefully pursued, developed payments of this kind to a greater number and amount than was supposed when that report was written, and it proved impossible to satisfactorily complete the investigation in time to prepare the promised statement for annexation to it. The tabulation was subsequently finished and submitted to the Congress, and is appended hereto in con-

nection with the Second Assistant's report. It was disclosed that payments aggregating, up to the 30th of June, 1885, \$979,959.67, had been thus unwarrantably made, and that the annual rate of charge then borne by the Department on this account was \$80,161.73. This expenditure was at once discontinued, and the Congress approved the action by reducing the appropriation accordingly. Some discussion arose between the Department and the companies concerned, but with one exception all acquiesced when they ascertained the state of the law, and continued to furnish the service as it had theretofore been. The Boston and Providence Railroad Company has denied the use of apartment cars, in disregard of the obligation of the statute.

Another correction in the practice of the Department was made during the past year by giving full effect to the thirteenth section of the act of July 12, 1876 (19th Stat., 82). which requires that every railroad, constructed in whole or in part by a land grant of the United States on condition that the mails should be transported thereon at such price as the Congress should by law direct, shall receive but 80 per cent. of the compensation authorized to be paid to others. Inquiry disclosed that many roads within the purview of the act had been erroneously paid full rates, and careful examination and computation fixed the amount of such excessive payments since the enactment at \$69,647.91. This sum has been deducted from the amounts due for current service to the roads affected, in the amounts respectively recoverable from each of them, and their rates of compensation adjusted in accordance with the statute. The saving in annual expense so effected is \$12,176.07. The details of this reclamation and reduction in annual charge, with the numbers of the routes and names of the companies affected, are set out in the appended report of the Second Assistant.

On the other hand, the rate of money expenditure for railroad transportation has been enhanced by the decision of the Supreme Court that the mail earnings of the lines of road which constitute a part of the holding of the Central Pacific Railroad Company, but which were not part of its subsidized road, cannot be claimed for credit upon its indebtedness to the Government, but must be paid. The annual rate of charge within this determination is above \$231,000 on account of the Central Pacific Company alone. In view, however, of the action of Congress at the last session, no payments have been made on this account.

The conviction will force itself upon the mind of every careful inquirer, it may be safely affirmed, that the present method of measuring the compensation to railroads for mail transportation is clumsy, unequal in effects, difficult of satisfactory adjustment, and by no means fixed upon a true basis. The subject deserves early consideration. The evils and inequalities of the present system increase with the increase of railroads and mails, the difficulties of adjustment become more trying, and the

peril of serious inconvenience to the service is far from inconsiderable. There appears no just reason to believe that a law may not be devised which shall give a proportionable uniformity of compensation to actual service, at a rate alike just to the carriers and the Government, and free, by its simplicity, from difficulty of application or liability to abuse. The desirability of the object, promising, if fairly attained, both satisfaction to the carriers and economy to the Government, renders it an urgent duty of the Department to press its consideration.

The Steamboat Service naturally diminishes in usefulness as railroads are built upon competing lines, affording the peculiar advantages to mail carriage of speed and regularity. An especial attention was due and has been rendered to this species of transportation. The compensation was found to be excessively disproportionate to the value of the service in some cases, and in others a substitution of different methods of supply proved more useful and economical. A reduction of \$148,133.04 in the annual charge has been effected since the 1st day of July, 1885, so that on the 1st day of July, 1886, 123 steamboat routes on all our coasts and inland waters, amounting in total length to 10,512 miles, required an annual outlay of but \$405,945.68.

The changes of the year added seven to the number of routes of this kind, but decreased the aggregate length by 1,337 miles, as well as the gross cost by the sum mentioned, realizing the expectation expressed in the report of last year, from the partial insight at that time obtainable of the service. The review which has now been made is sufficiently complete to leave opportunity for little, if any, reduction during the current year. Upon the whole, some increase in the totality of cost will probably ensue because of the comprehension within this class of the foreign mail route to Havana.

The act of March 3, 1885, authorized a contract for combined inland and foreign steamboat mail service in one route, when not more than two hundred miles intervened between ours and the foreign office, upon the same terms and chargeable on the same appropriation as a contract for inland steamboat service. If the statute can be made applicable to any other, it was without doubt designed wholly for the Gulf route between the coast of Florida and the island of Cuba. Pursuant to its purpose an attempt was made during the last year to negotiate such a contract, and proposals were duly advertised for. Two only were returned for service between Tampa and Havana, both tendering a semi-weekly service, the one for \$100,000 a year, the other for \$66,000. The price was deemed excessive, and both proffers were declined.

The purpose of the Congress, further manifested during the last session, and the desirability in every aspect, that a highly efficient mail service should be established with Cuba in connection with our Atlantic coast line from New England and New York, induced a renewal of negotiation, and resulted in a contract for service between Tampa, Key West, and Havana by the new steamer *Mascotte*, and a consort of equal

excellence, from August 1, 1886, to June 30, 1887, to be rendered three times a week between November 1 and April 30 and twice a week during the residue of the year, on schedules to be fixed by the Department, carrying all mails both ways for \$54,450. This service covers and dispenses with that before maintained between Tampa and Key West, at an annual cost of \$22,565.74; performs our foreign mail carriage to Cuba and Porto Rico, which, computed in the foreign-mails office at sea and inland postage on the quantity estimated by the weights of 1885 and ordinary increase, amounts to \$24,159.07, and also the carriage of the open and closed mails of European countries to Cuba, for which we receive now about \$3,500.

In addition, it is anticipated that arrangements will be made to transport the Cuban mails to this country, and to some extent their European mails, and thus add a substantial sum to the receipts of this route. Performance of the trip each way in twenty-five hours is stipulated, and the time between New York and Cuba is already reduced from the four and one-half days required by the sea voyage to three days by this service, besides a greater expedition for all mail originating in the South; and it is confidently expected that within no long period the railroad time will be so accelerated between Washington and Tampa that but sixty hours will separate Havana and New York. So soon as such celerity shall be acquired, in addition to the regularity and security of the new service, it must command the transportation of all mails both ways, and prove not only of high value to business correspondence, but perhaps directly remunerative. Before bringing this negotiation to a conclusion, the two lines of steamships which ply weekly between New York and Havana were solicited to undertake the carriage of our outward mails to the latter port, but refused it at any less price than \$500 per trip, leaving the Department little choice.

The arrangements now made are experimental, limited to a short period, and submitted with particularity of detail, in order that, with an easy view of all the circumstances, the Congress may readily provide such other or further directions as shall be deemed most expedient.

The Star Route Transportation has been both improved in character and amount, and reduced in cost during the year past, in a satisfactory manner, by judicious changes and arrangements under the direction of the Second Assistant Postmaster-General. The reduction in the annual rate of cost effected by orders between July 1, 1885, and June 30, 1886, was \$301,479, besides other changes to take effect July 1, 1886; and contracts were made during the year for four years, beginning July 1, 1886, in the fourth contract section, by which an annual saving of \$238,175.10 was accomplished. The value of this work will be apparent from a few comparative statements. During the year ended June 30, 1885, the increase in annual cost of this service had been \$324,863, and on the 30th of June, 1885, it stood at the annual rate, for 12,371 star routes, aggregating 232,222 miles in length, of \$5,414,804.

Contracts had been made that took effect on the 1st of July, 1885, which operated to make the annual rate of charge on that day to stand, for 13,428 routes, of a total length of 237,528 miles, at \$5,653,660.95. On the 1st day of July, 1886, there were 13,961 routes, aggregating in total length 237,444 miles, at the annual rate of charge of but \$5,091,225.28. Thus, between the 1st day of July, 1885, and the 1st day of July, 1886, there was an increase of 533 in the number of routes, a decrease of but 84 miles in their aggregate length, but a decrease of \$562,435.67 in the annual cost of maintenance.

During the year 1885 the cost per mile traveled was 6.52 cents; during the year 1886 it was 6.43; and during the current year it must be still further reduced under the provision made for this service:

Contrasting the fiscal year 1886 with the average of the preceding seven years, there was an increase of 5,522,485 miles in the total travel performed on star routes, or 7.11 per cent., a decrease in yearly expense for the service of \$573,356, or 9.68 per cent., and of \$1.24 per mile of route, or 16.17 per cent.

The results have been attained by careful examination of the service and systematic effort to effect improvement and economy.

The Mail-Messenger Service, though not so great in extent, yet exhibits like good effects of the business care which has been bestowed upon it. On the 1st day of July, 1885, the annual rate of cost for 5,317 routes, aggregating 4,079 miles, was \$879,217. On the 1st day of July, 1886, there were 5,339 routes, an increase of 22, in total length 4,136 miles, an increase of 57, at the annual rate of cost of \$831,223, a reduction of \$47,994.

Fines and Deductions were imposed on contractors and others in the service, for faults and omissions, as follows:

Railroad service	\$162, 151 24
Star service.....	62, 015 12
Steamboat service	28, 365 39
Mail-messenger service.....	2, 316 12
Postal clerks.....	3, 872 11
	<hr/>
	258, 719 98

Against which were remissions as follows:

Railroad service	\$16, 450 86
Star service	4, 144 81
Steamboat service	1, 234 25
Postal clerks.....	112 93
	<hr/>
	21, 942 85

Leaving net result of.....	236, 777 13
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The Railway Mail Service, its extent, changes, operations, and condition, are so fully presented by the report of the general superintendent, with numerous tabular exhibits, as to require no extended or special comment. "These clearly show," as the superintendent says, "that the service, through the earnest efforts and hearty co-operation

of officers and men, continues to maintain the high standard of efficiency attained in years past, and has afforded to the public improved facilities and increased accommodation, as opportunity offered or experience suggested." The changes of method or extent are all in the way of enlargement, demanded by the increase of business, the growth of the service, and its extension upon new lines.

At the close of the fiscal year there were 871 lines of railway post-offices, an increase of 13; of clerks in the service, 4,573, an increase of 184; of cars and apartments, 2,204, an increase of 39. The total daily distance run by clerks was 123,745 miles, an increase of 2,416, upon 110,672 miles of railroad, an increase of 3,166, and the entire number of miles of service performed during the year by the clerks was 100,923,910, a gain of 4,522,110, as compared with the preceding year. The number of pieces of ordinary mail handled by these clerks rose by 381,462,075 to the large figures of 5,329,521,475.

These figures show the large proportions and the general rapid growth of this service.

The statistical returns of case examinations and of errors give a favorable showing of the efficiency and discipline of the service, and the record of probationers is very much better than for several years past.

The casualties to clerks have been as numerous as in other years, seriously injuring 56 and slightly injuring 60 others, but fortunately causing no deaths. I cannot pass this point without recalling the discussion in the last report, in which the duty of some provision was urged. When pensions are given with generous lavishness, twenty years after the alleged injuries, for every slight disorder the soldier sustained, the spirit of justice equally demands some provision for the seriously maimed servants of the Government in the severe and perilous mail service by rail.

The fast-mail service has continued in its high condition of excellence during the year. No changes have occurred, except that on the line from New York to Saint Louis a valuable gain of time was arranged with the railroad companies, of great utility to the southwestern dispatches.

The Foreign Mail Service has been, for the most part, very satisfactorily performed during the year under review. The transportation was chiefly upon the ocean, with some increased use of railroads in the carriage of Mexican mails. No separate account of the weights of open mails sent by rail is taken, settlements going on the triennial statistics.

The gross weight of the mails sent out by sea was 1,300,581,114 grams, or 2,867,781 pounds; of which the letter and post-card mail was 226,847,338 grams, or 500,198 pounds, and of prints and other matter 1,073,733,776 grams, or 2,367,583 pounds. The increase in the total weight of mails so carried, contrasted with the previous year, was 73,651,984 grams, or about 162,400 pounds, a gain of over 6 per cent.

Of the letter mail, 92.86 per cent. was sent across the Atlantic and

but 7.14 per cent. to countries where American vessels mainly ply, on the American continent and islands, and across the Pacific Ocean. Of paper mails, there was, as usual, a less percentage to Europe, the proportions being 81.48 and 18.52, respectively.

The triennial count of foreign mail matter, required by the Postal Union Convention, was made during seven days in October, 1885, and a like period in April, 1886, at the several international exchange offices of this country, to provide the statistics required by the International Bureau for compilation and general information. The tabular statement of our foreign mails, by number of pieces, computed on this basis, will be found appended to the superintendent's report in the appendix. The estimated annual number of all articles mailed from this to foreign countries is 86,755,535, and of those received 59,977,356. There is a considerable excess in favor of this country in the articles mailed prepaid, and also in the amount of due postages collected; indicating that the mutual exchange system of the Universal Postal Union is not pecuniarily disadvantageous to our Government. The entire cost of handling the foreign mails outstrips, however, the receipts derived from the service, upon any just basis of estimation, as was demonstrated in the last report of the Department.

The direct expenditures specially for mail transportation to foreign states were as follows:

For sea conveyance:

Transatlantic	\$287,927 22
Transpacific	26,950 71
Canadian, West Indian, Central and South American.....	35,507 18
Inward mails from Shanghai and non-conventional countries	497 02
Isthmian railway transit.....	6,561 37
Balances of accounts to foreign countries (estimated).....	55,000 00
<hr/>	
Total (partly estimated).....	412,443 50

These items include nothing for the charges on account of domestic transportation of foreign mail matter dispatched, or received and delivered, the far heavier share of their cost.

Three foreign postal agencies, at Colon and Panama, in the United States of Colombia, and at Shanghai, in China, have been maintained. The cost of the Panama agency was \$860, and of the Colon agency up to the end of March, so far as allowed, \$225. The expense of the Shanghai office, in part reported and in part estimated, was \$1,800.

Arrangements have been effected with the Panama Railroad Company to directly perform all necessary service at Colon, and the employment of the consul there is dispensed with, which will result, it is believed, in relieving the interruptions and inconveniences hitherto occasionally sustained at that point. The Chinese Government has recently indicated a purpose to establish postal communication with other countries, which, if perfected, will enable the Shanghai agency to be discontinued by the end of the current fiscal year.

The disagreement between some American steamship companies and the Department in respect to their compensation and the method of engaging their vessels in the service occasioned much healthy discussion. The carriage of our foreign mails was, however, but very slightly interrupted or inconvenienced. The principal diminution from the best service attainable on existing lines was due to the refusal by the Pacific Mail Steamship Company and the Red D Company of the use of their vessels to the Government, and occurred chiefly on two routes. From San Francisco to Japan and China the service was performed by the Oriental and Occidental Steamship line alone, whose steamers sail from our port at intervals of about twenty days, alternating with like sailings by the vessels of the Pacific Mail Company; and the refusal of the latter reduced the frequency of outward dispatches by one-half, though not otherwise diminishing or impairing the service, which was well performed by the former company. The other course lay between New York and the Venezuelan ports on which the outward mails were usually dispatched first to the Barbadoes, and thence to Venezuela, protracting the duration of their carriage four or five days, a loss somewhat compensated by the greater frequency of trips obtained, being five in the month to three by the Red D line. Aside from these two routes, the interruptions and delays were but little more than are almost inseparable from existing means of communication with the States of Central America. The inward mails were not affected.

The actual additional inconvenience to the general public on either of the mentioned routes proved comparatively quite insignificant, for the reason that, aside from such mail matter as relates to the cargoes of the steamships, the correspondence between the countries referred to and the United States is very limited; and such as concerned the cargoes the recusant companies transported on the same vessels—under sections 3987 and 3993 of the Revised Statutes—no interest being more subserved by such mails than their own. The proof of the generally favorable condition of this portion of this service is seen in the fact that the weights of all mail to the various ports not transatlantic increased from a total in the previous year of 211,070,837 grams to a total in the last year of 214,334,460; a gain of 3,263,623 grams being incompatible with much interruption in the mail transportation. Had the interest of contestants not have awakened attention and aggravated complaint through the press, it is probable the difference in the service, such as it was, might have taken place without attracting special notice, except by shippers on these lines.

The customary monthly invitations to all American steamship companies for a tender of their vessels were continued during the year, and, after the passage by the Congress of the postal-service appropriation without provision for any subsidy, the Red D Company placed their vessels at the service of the Department on the usual terms, and the Venezuelan mails have, since the 14th of August last, been carried by

those steamers in their former satisfactory manner. The Pacific Mail Steamship Company, at first declining, in the end proffered the service of their ships also, and since the beginning of September they have been regularly placed on the monthly schedules of dispatches for the ports to which they ply, and have transported the mails as usual.

The Department having during the past fiscal year allowed the sea and inland postages to United States steamships, pursuant to section 4009 of the Revised Statutes, and the appropriation for the current year having been passed upon the basis of that rate of compensation, a similar rate of payment to all such vessels is still continued; and the estimates for the next fiscal year have been calculated accordingly. This provides a rate of compensation to such steamships three times greater than, with the exception of two lines, they had habitually received for seven years previously—a compensation quite adequate to the service, when the carriage is performed by vessels sailing in the course of their own business as common carriers, and upon schedules of arrivals and departures regulated by their own convenience, and without other obligation to the Government than so to carry and deliver with proper care and diligence. It will have been observed from the figures already given that while the proportion of mails carried during the past year to those countries to which American vessels sail, as compared with transatlantic mails, was, approximately, one-ninth, the cost was nearly one-fifth, because of the higher rates paid vessels of United States registry.

The dispatches from San Francisco to the Orient are now made at intervals of ten days, one-half of the sailings being of ships of the Oriental and Occidental Steamship Company. That company is of United States ownership, as I am credibly informed, yet two of its three vessels are not of United States registry. Consequently but one, the San Pablo, has received the sea and inland postages, the other two being by law limited to sea postage only; notwithstanding this company faithfully performed this service at a time when the refusal of its competitor's ships rendered its aid more than usually desirable. The statutory rule works still more unfair results, now that the two companies divide the carriage; because the quantity of mails on which the compensation is computed is reduced approximately one-half; and thus the company which deserves recognition of its timely fidelity finds not only the extent of its service materially reduced, but the rate of payment for two ships only one-third that allowed to ships whose service was then denied to the Government. It would seem too obvious to require particular expression that the Department ought to be authorized to pay the vessels of the Oriental and Occidental line the same rate of compensation as is paid the other, being also of American ownership, as a just exception to the general rule.

Although the Department has sedulously preferred the steamships of the United States wherever they sail, the greater proportion (about

nine-tenths) of the foreign mails have been necessarily transmitted in foreign bottoms. No instance has arisen of declination by any such vessel to carry whatever quantity of mail has been offered it for the sea postage only; and no losses of mails dispatched by us have been sustained during the year. Our transatlantic service has been especially excellent, and may be pronounced without doubt the most expeditious and satisfactory of any upon the seas. The swiftest ships of all the companies in that navigation are employed, and the frequency of dispatches and speed in transit so secured surpass the service rendered in the transportation of the inward mails from Europe. The Department has information that the British Government has recently adopted this policy, in the expectation of improving their service to this country.

In the appended report of the Foreign Mails office a particular statement is given of the quantities of mail matter transported by, and of the payments and rates to, each of the various companies which participated in this service, with much other interesting matter.

Petitions, numerously signed by well-known and enterprising merchants and manufacturers of New York, Philadelphia, Baltimore, New Orleans, Saint Paul, Minneapolis, and other places, have been presented to the Department for the establishment of direct and regular mail communication with the Argentine Republic, the Republics of Uruguay and Paraguay, and for a semi-monthly service to the Empire of Brazil. These petitions represent that within a few years past the Argentine Republic has increased in population and wealth with greater proportionable rapidity than any other country on the globe; that our manufactures, particularly machinery and coarse cottons are in demand there, but our trade is limited by the lack of direct mail facilities and direct passenger and freight lines; that our direct monthly mail service to Brazil has increased our exports of manufactures to that Empire; and it may be confidently expected further advantageous results would follow the solicited enlargement of mail communication.

No authority of law exists of which the Department can avail itself to meet this request. The statutes now give power to employ only such vessels as may be intending voyages to foreign ports in the course of their trade. It has been a constant study to secure by such means the greatest possible frequency and celerity of dispatch, and every opportunity afforded by the sailing of any vessel promising any such advantage has been promptly seized, so that, at the present time, the Department enjoys the best methods for the transportation of its mails to foreign ports which the existing establishments of lines of ships or the occasional sailings of vessels foreign-bound render possible. No gain in regularity, frequency, security, or speed can be attained unless other ships shall be put upon the seas by private adventure or by foreign powers, or other provision shall be made by the Congress.

The particular application of these petitioners appears to me to be entitled to serious consideration. There is now direct mail communication

between this country and no port south of Rio de Janeiro. To the latter the ships of the United States and Brazil Mail Steamship Company afford but one dispatch a month. To more northern ports of the Brazilian Empire, somewhat greater frequency is attained by the occasional use of other vessels; but the sailings of these are not regular, and the gain by their employment is but moderate. It is not to be doubted that the extension of direct service to the southern Republics of the continent, and regular semi-monthly service to the Brazilian metropolis would be valuable and desirable, measured by the principles which should alone govern sound postal administration. The application of the petitioners is entirely distinguishable from the subject which was discussed in the last report, and was thoroughly considered and wisely resolved by the Congress at the last session. The proposal then negatived was to pay all existing American companies for no more and no better service than they now render, and for years had rendered, a compensation much beyond what they had been accustomed to receive, and much beyond the limits of adequate remuneration. It would have secured no additional advantages to the postal service; but, instead, would have multiplied its cost, with no other tendency than to enable existing carriers to intimidate competition, and thereby restrict the increase of facilities available for the service, as well as for commercial intercourse. It would have been not only an unnecessary but a pernicious bestowal of the public money on one class of carriers.

This application suggests the augmentation of existing service and the creation of new with the particular states, in both aspects desirable; the purchase of mail facilities which do not exist, and cannot be expected soon to exist in the ordinary manner. The requisite expenditure would be for something worthy of expenditure, and within the general usage and the sound principles of the postal service. It should ever be regarded as wise administration to keep postal facilities rather somewhat in advance than in anything lagging to the rear of all the proper requirements of intercourse excited by the ties of blood or race, popular education and enlightenment, trade and commerce. Upon this footing very many domestic routes are maintained at a cost many times beyond their immediate and direct returns, but undeniably to the great increase of the country's general welfare; and whenever the substantial need of intercourse by the mails arises provision for such communication is promptly made.

These considerations suggest inquiry whether there be the need of such mail communication with the mentioned countries of the southern continent, whether that need be worthy of special effort to meet it, and whether it can be supplied at a cost justifiably adequate to the present and prospective value of the proposed intercourse. The determination of these inquiries rests with the Congress, and the Department is privileged, and by its information able, only to express the general opinion that such service would be highly useful and is fairly demanded by the

interests of the country, and its early establishment should be attempted; and I respectfully suggest that you invite the attention of that body to the subject in such terms as shall commend it to careful consideration. Should the recommendation meet with favor in its general aspects, the Department might be authorized to solicit proposals for the performance of such a service as the Congress should deem desirable, with limitations as to cost prescribed by its judgment of the probable resulting value to the country or otherwise. There is good reason for the expectation that such an invitation, open to fair and general competition, for a service of a sufficient duration to warrant the requisite provision of vessels, would result in proposals that would enable a desirable contract to be made and a system of communication to be established of great and lasting advantage to the United States. The rapid development and growth of the countries in view, their lack of manufacturing establishments of their own, the desirable character of their products for exchange, and the advantages of extending the fields of enterprise of our citizens, as well as of creating firmer ties between the peoples of our continent, invite the extension and enlargement of our postal facilities by every just, reasonable, and economical method, in consonance with sound principles.

A recent casualty on the sea has suggested a defect in the statutes which deserves consideration. The steamship Oregon of the Cunard line was lost off Fire Island on the 14th of last March. She was then in the service of the British Government, bringing to this country 598 bags of mail, of which, from time to time, 464 have been recovered, scattered along the coast from Portland to Cape Hatteras, 134 bags being wholly lost. Of the matter recovered, the greater portion was deliverable, though much was destroyed by saturation. Application for salvage was made to the Department, but no authority of law appeared to exist, nor was any appropriation available for such an expenditure. It is true the charge was properly upon the British office, but our own citizens were sufficiently interested to have warranted the outlay on our part, whether eventually indemnified or not. Losses have already happened, and it is a constant risk that some vessel outward bound with our mails may be lost under such circumstances that by the offer of reasonable salvage the quantities saved may be much increased, and it would seem that power might be wisely invested in the Department to incur such expense as should appear to be proper in such a contingency.

Long Unsettled Accounts against the Department have existed in favor of the ocean carriers for the transportation of closed mails sent over our service by foreign countries, which the Department has now adjusted, and, so far as appropriations are available, has paid. There remains a sum due which will be submitted to the Congress for appropriation as a deficiency chargeable to 1883 and previous Years.

The origin and nature of these just claims should be briefly stated. The convention of 1878 establishing the Universal Postal Union took effect on the 1st day of April, 1879, and from that date the United States were bound to carry the closed as well as open mails of such foreign states as desired our service, and to collect payment therefor at the conventional rates computed upon the counts and weights taken during the statistical periods provided for. To this convention the ocean carriers were not parties. Their dealing was with the Department, from which they were entitled to the sea postages on the mails they carried, in quarterly payments from time to time as the service was performed. The Department has kept the accounts, made recognition of their service, and adjusted their compensation; but, since the Postal Union arrangements begun, has heretofore ignored in these settlements the transportation of the foreign closed mails, notwithstanding it received payment from the foreign states of origin for such transportation. These facts the Auditor reports as clearly shown by his books and papers, and also the total sum so received by the Department from foreign postal administrations for such sea carriage of closed mails. The respective quantities transported by the various steamships did not, however, appear; and to adjust these between them and at the same time protect the Department from any liability to payment of more than it had received, the several owners of the ships employed entered into written agreements, at the request of, and now filed in, the Department, that the basis for determining the amount due each claimant for such conveyance of closed mails should be the biennial statistics taken in pursuance of the Postal Union Convention during the years elapsed, and the amount found due should, when paid according to such adjustment, be a full discharge and satisfaction of all and every claim by such claimant for carrying any part of such closed mails during the period in question. Upon execution of these agreements, and upon the Auditor's certified statements of the amounts due the several companies which performed the carriage, recognitions of their services, reciting the facts, have been signed for the full period during which they were rendered up to the 30th of June, 1886, except in two or three cases awaiting adjustment; and for the greater part of the services rendered since July 1, 1883, warrants have been drawn against the appropriations available.

The Auditor furnishes me the following summary of these settlements:

For services prior to July 1, 1883	\$37,468 73
For the fiscal year 1884.....	15,823 28
For the fiscal year 1885.....	18,522 31
For the fiscal year 1886.....	19,622 80
Total	91,437 12

Deficiency appropriation will be necessary to discharge the obligation for the amount recognized prior to July 1, 1883, and for \$2,168.44 of the amount for the fiscal year 1884, which was not settled in time for payment while the appropriation for that year was available.

With a view to accurate statements of future service, postmasters at our international exchange offices have been instructed to weigh all foreign closed mails received, and regularly report to the Department. There may arise a difficulty in attempting to make payment to the companies on the basis of actual net weights of mails carried by them respectively, because under the statute the postages (whether sea or sea and inland) on the mails transported are alone payable, and in the case of the foreign closed mails the amounts received from the foreign countries must, perhaps, be taken to be such postages, and these are not computed upon the actual net weights, but upon the basis of the weights taken at the triennial statistical periods provided by the convention. Thus a difference might arise between the amounts received and the amounts paid by the Department, whereby a greater or a less sum than the statute authorizes might in the total be paid to the various carriers. But, for distribution of the amounts received, the actual net weights transported may be employed as the basis of relative adjustment between the respective carriers, perhaps, with greater satisfaction and fairness than any other means.

A juster method of compensation by the Department to its carriers would be to pay them for the actual net weights respectively transported, the rate which by the Postal Union Convention the United States are entitled to receive for such transportation from the foreign country whose closed mails are so carried, and not involve the carrier in the inquiry of actual receipts computed on the statistical basis. Another reason for such a course arises from the fact that international settlements are made by calendar years and are frequently much delayed, so that the amounts distributable to the carriers cannot be known until long after their quarterly payments for transportation of our mails, giving rise to trouble and delays, which are well illustrated in the accounts recently adjusted.

A slight amendment of the statute would cure the difficulty, and is not only due the carriers but the business character of the Department. Promptitude, exactness, and justice ought to characterize all the business dealings of the postal administration, which is more a system of business than of government.

Another such account in favor of the Panama Railroad Company has been adjusted. The circumstances are, in brief, that, prior to the entrance into the Postal Union of Mexico and the Central American States, the Pacific Mail Steamship Company was allowed sea and inland postage on mails to those countries, and in consideration of it paid the Isthmian transit charges. But as, one after another, these countries entered the union, the compensation to that company was fixed at sea postage and it discontinued payment to the Panama Company for its railroad carriage, which became a charge directly on the Department, but remained unpaid. The claim of that company for compensation has been delayed since early in 1883; but careful examination has demonstrated its correctness, and the amounts due since June 30,

1883, have been paid. There remains due for services performed prior to that date the adjusted and recognized sum of \$2,916.95, to authorize payment of which a deficiency appropriation is necessary and should be made. For the future a system of business has been arranged which will, it is expected, afford better service and enable accurate quarterly settlements and payments.

THE FINANCIAL EXHIBIT.

The financial condition of the postal service for the past year has improved beyond expectation. The previous year closed with a deficiency of postal revenue to meet postal expenditures of almost seven millions of dollars, exclusive of the cost of transportation on the Pacific railroads. Both the reduction in the rate of postage on second-class matter and the increase in the unit of weight of first-class matter from a half ounce to an ounce, came into effect on the first day of July, 1885, and thus affected the revenues for the entire year, restricting by the probable amount of two millions of dollars the increase otherwise to have been fairly anticipated. Counting every reasonable promise, no expectation of a revenue exceeding \$44,000,000 could be justifiably indulged. On the other hand, the estimates for the expenditures of the year which had been submitted by the Department for the action of the Congress were \$56,099,169.50; the appropriations made by that body amounted to \$54,183,642.14; and upon review at the time of the last report it appeared necessary to fix the probable total cost as high as \$53,000,000, and the resulting cash deficiency at \$9,000,000, exclusive of the service performed by the Pacific railroads.

The results may, therefore, be rightfully regarded as gratifying. For, although the revenue falls short of the expected total by \$64,000, the expenditures have been limited to less than \$51,000,000, and the deficiency is diminished within that of the year before, being below \$6,900,000, exclusive of Pacific railroad service.

The last three years have sustained the effects of the reduction of letter postage from 3 to 2 cents, of rates of second-class matter by one-half, and of doubling the unit of weight of first-class; the heaviest checks upon its receipts which the service ever suffered. From 1879 to 1882 the growth of postal business was unexampled, and the service became more than self-sustaining. Beginning with the last year of that prosperous period, the following condensed summaries of the finances of four years will present the general effects of these changes upon the revenues, as well as the growth of cost. The cost of Pacific railroad transportation on unsubsidized roads is excluded from the cash expenditures, because no payments have in fact been made therefor, and the Congress, since the decision of the Supreme Court previously mentioned, has refused any appropriation; but the statement of expenditures embraces every disbursement for the several years respectively, although in part actually made after their expiration.

FOR THE YEAR ENDED JUNE 30, 1883.

Revenue: Ordinary postal.....	\$45,097,073 24
Money-order business.....	411,619 37
	<hr/>
	45,508,692 61
Expenditures to September 30, 1885	\$43,519,187 96
Net balance closed by bad debts	38,802 82
Audited claims	1,758 44
	<hr/>
	43,559,749 22
	<hr/>
Cash surplus.....	1,948,943 39
Deduct credits to Pacific railroad companies for transportation	915,710 22
	<hr/>
Net surplus	1,033,233 17

FOR THE YEAR ENDED JUNE 30, 1884.

Revenue: Ordinary postal	\$42,818,635 00
Money-order business (corrected).....	507,323 81
	<hr/>
	43,325,958 81
Expenditures to September 30, 1886	\$47,062,623 56
Balance closed by bad debts	8,455 83
Liabilities outstanding	3,500 75
	<hr/>
	47,074,580 14
	<hr/>
Cash deficiency	3,748,621 33
Add credits to Pacific railroad companies for transportation.....	1,543,417 60
	<hr/>
Total excess of cost over revenue	5,292,038 93

FOR THE YEAR ENDED JUNE 30, 1885.

Revenue: Ordinary postal.....	\$42,151,910 53
Money-order business.....	408,933 30
	<hr/>
	42,560,843 83
Expenditures to September 30, 1886	\$49,506,337 56
Outstanding liabilities adjusted	1,964 53
Unadjusted outstanding liabilities (estimated)	30,000 00
	<hr/>
	49,538,302 09
	<hr/>
Cash deficiency	6,977,458 26
Add credits to Pacific railroad companies for transportation	1,344,207 44
	<hr/>
Total excess of cost over revenue	8,321,665 70

FOR THE YEAR ENDED JUNE 30, 1886.

Revenue: Ordinary postal.....	\$43,597,871 08
Money-order business.....	350,551 87
	<hr/>
	43,948,422.95
Expenditures to September 30, 1886	\$50,627,553 37
Liabilities, amount certified to Auditor but not reported for payment	24,612 84
Estimated amount not yet reported	175,000 00
Net balance bad debts	12,174 25
	<hr/>
	50,839,340 46
	<hr/>
Cash deficiency (partly estimated).....	6,890,917 51
Add credits and earnings of Pacific Railroad Companies for transportation	1,363,240 01
	<hr/>
Total excess of cost over revenue	8,254,157 52

If the sums which, under the recent decision of the Supreme Court, are claimed to be payable in money to the Pacific Railroad Companies instead of by application on their indebtedness should be appropriated by Congress and so paid, the totals of cash expenditure would be increased and the credits to the companies diminished, as above given, for 1883, by \$217,697.89; for 1884, by \$193,800.73; for 1885, by \$247,830.44, and for 1886, by \$251,101.61, and the cash deficiencies for the last three years swelled accordingly.

The Revenues shown by the foregoing statements did not wholly arise from postages, but the effects of the changes in rates as well as of the business condition of the country have been mainly upon that source of income; and to properly estimate these influences the comparative view should be so confined. The receipts of this kind during the years mentioned as shown by the accounts have been as follows:

For the year ended June 30, 1883	\$43,014,043 58
For the year ended June 30, 1884	40,745,853 06
For the year ended June 30, 1885	40,056,246 00
For the year ended June 30, 1886.....	41,447,095 88

The two earlier years have in this statement the advantage of credits exceeding \$150,000 a year for the amount of official stamps and stamped envelopes formerly issued for Government use, which were discontinued at the end of June, 1884, by the substitution of the penalty envelope; and, in nice reckoning, the allowance should be made.

It would naturally be expected that the revenues, unless affected by legislative changes in rates, should rise year by year, from increased employment of the service correspondent with increase of population; and such has been the ordinary rule. It did not obtain, however, in the year 1885. The reduction of first-class postage from 3 to 2 cents took effect October 1, 1883, and operated a reduction of these receipts in 1884 to the amount of \$2,268,189.92, notwithstanding the enlarged volume of mail matter. The next year failed to show any increase, but, instead, the diminishment continued by the actual net sum (allowing for the amount of official stamps credited in 1884) of \$535,356.71. This must be attributed mainly to the business depression suffered in 1884 and the winter of 1885, whereby the growth of patronage was seriously checked.

In the last report the evidences of a restoration already begun were pointed out. The figures of the year are strongly confirmatory. The revenue sustained the loss of about \$1,100,000 yielded to newspaper carriage, and probably \$800,000 to \$900,000 more from the increase of the unit of weight, and yet made the net increase of \$1,390,869.19 in the total postages collected, or 3.4+ per cent. Had the rates continued unchanged, there can be little doubt the gross revenue of 1883, the highest in our history, would have been exceeded.

The statistics of other branches of the service, given in the appendices, corroborate the inference drawn, and justify the expectation of

continued gains of revenue hereafter, unless unforeseen adversity befalls the country or legislative changes abridge the present rates of income.

The chief other sources of revenue are the rental of boxes in post-offices of the first, second, and third classes, and the net gains of the money-order business. The former yielded \$2,018,048.04 during the year, an increase of nearly \$60,000, or 3 per cent., over the preceding year. The money-order revenue fell off over \$58,000 from the causes previously explained. Taken together the net increase of entire revenue was 3.2+ per cent., and of the volume of business by which it was gained doubtless over 7 per cent.

Upon this exhibit the increase of the revenue for the current year and for the year to come, except in newspaper postage, is estimated at 7 per cent.—an expectation which is the more reasonable because some gains must arise from the special-delivery service and some from extension of the limits ofailable matter.

Expenditures.—The increase of population, the rapid development of new country, the constant addition to our railroads, and the sound policy of supplying all our people with good postal facilities whether or not remunerative to the service, necessarily demand a continual expansion of means and cost, year by year. Every new post-office is established at temporary loss, and nearly every new route of carriage. Since the Government monopolizes the business for the benefit of the people, it is due that the conveniences it affords should be in advance of anything which private enterprise would accomplish. The enterprising spirit which marks our national character and has given our national development is well entitled to and will accept nothing less than the best methods reasonably to be provided for the various wants of all localities.

Keeping in steady view this principle, the concurrent obligation to carefully maintain a just economy in providing the means, has been studiously acknowledged by the practice of the Department, and has resulted during the year past in somewhat limiting the ratio of increasing cost with advantage to the service.

Of the total appropriations for the year, amounting to \$54,183,642.14, the entire outlay actually made and estimated to be made, is but \$50,839,340.46, leaving a balance to be eventually covered into the Treasury of \$3,344,301.68.

The percentage of increase in cost over the year before was 2.6+; a marked decrease in the annual rate of increasing expenditure during a number of years past, as is shown by the following table:

Expenditures postal service.

Year ended June 30—	Total on account of year's service.	Increase over previous year.	
		Amount.	Per cent.
1880	\$36,414,429 03	\$3,030,301 53	8.0
1881	39,722,783 06	3,308,354 03	9.0
1882	40,441,192 06	718,409 00	1.8
1883	43,559,749 22	3,118,557 16	7.1
1884	47,074,580 14	3,514,830 92	8.0
1885	49,538,302 09	2,463,721 95	5.2
1886	50,839,340 46	1,301,038 37	2.6

In the year 1882 the reduction of star-route extravagance specially affected the contrast.

No one of the thirty-six items of appropriation for the year past has been exceeded by the expenditures except that for ship, steamboat, and way letters—a feature of cost wholly beyond departmental control—and the excess on this account amounts to but \$50.83, for which sum only will a deficiency appropriation be required to meet the exigencies of the year.

The principal items of increase in cost over the year 1885 are, for postmasters' compensation, \$104,329.23; for clerks in post-offices, \$103,810.28; for free-delivery service, \$326,344.15; for railroad transportation, \$591,088.07; for railway postal clerks, \$221,568.57; for star-route service, \$49,197.19; for stamped envelopes and wrappers, \$66,269.48; for foreign-mail transportation, \$33,466.89; and for special-delivery service, \$67,652.14. Of these charges, the statutes regulate the compensation to postmasters and to railways; the increase in the cost of post-office clerks, railway postal clerks, and the free-delivery service was necessitated by the employment of additional clerks and carriers demanded by the growth of the business; the payment of sea and inland postage to American steamships and increased weights of mail, added the enhanced outlay for foreign mail transportation; the special-delivery service came for the first time into being and more than repaid its cost; and the increase in the disbursement for stamped envelopes and wrappers simply marks the increased sales and revenue gains. In the star-route service, although an actual increase is shown in the total expense, there was in fact a large saving effected. As has been previously stated, the annual rate of cost on the 1st day of July, 1885, established by contracts made before your administration began, was \$5,653,660.95, which was so reduced by curtailments and new contracts during the year that on the 1st day of July, 1886, this annual rate stood at only \$5,091,225.28. Yet inasmuch as these reductions could only be made from time to time during the year as opportunities were afforded by the results of examination, the expenditures continued at the rates fixed until the orders became operative, and some changes only took effect at the beginning of the new year. The actual diminishment of cost during last year was therefore less than the rate of reduction established and operative hereafter. Yet it was

considerable, as appears from the fact that the total expenditure was but \$5,403,259, being \$250,401.95 less than the rate at which the year began, and which, but for the economical changes effected, would not only have caused expenditure of that sum, but an additional amount would have been necessary for the new service actually added during the year.

Upon the other hand, in twenty-one of the thirty-six items of appropriation there was an actual decrease in cost, as compared with the previous year, while in supplies furnished there was generally an increase of quantity; and in twelve items there was even decrease from the expenditures of the year 1884.

The aggregate of the twenty-one items of diminished cost from 1885 was \$284,956.27; and the aggregate of the twelve items of decrease from the expenditures of 1884 was \$249,663.76.

Upon the whole survey, it appears that the year has afforded a start towards closing the wide gap between revenue and expense. The revenue, surmounting such restraining influences as would, if removed, have allowed twice the actual net increase, has risen by a higher ratio than the expenditures—3.2 + for the former to but 2.6 + per cent. for the latter. Here seems to be promise that the day is attainable when the gain in revenue will overtake the gain in disbursements if a firm economy be steadily imposed, although in the mean time every proper and judicious extension and improvement which the country requires shall go forward.

For the Current Fiscal Year no elaborate discussion of the probabilities is necessary, or would be in this place profitable. The appropriations have been made and, so far as can be predetermined, are ample in total amount, being \$54,365,863.25, from which the hope is indulged a million or more may be saved. It is, however, probable that the item of \$2,000 for ship, steamboat, and way letters will be again exceeded, and that the increased demand for adhesive stamps and stamped paper, excited by the growing business prosperity in the country, will occasion expenditure for such supplies greater than the appropriations which followed the low estimates of the Department; a deficiency, however, devoutly to be desired. There is risk also that the item for registered-package, tag, official, and dead-letter envelopes may be overrun, though to but a moderate amount, by the necessities of the service.

The probable revenue for this year, as well as for the year to come, has been carefully considered and estimated in conference with the Third Assistant Postmaster-General, and in his appended report, a discussion of such reasons as governed the estimate are ably given at length, in connection with the detailed estimates. Briefly, the experience of the past year, the apparent indications of general prosperity, and the unchanged rates, give reason to believe more than 7 per cent. increase of receipts will be derived from postages; that in second-class matter where more

than 8 per cent. was gained last year, as much as 10 per cent. may be expected during this; and that since the clerical charges of the money-order business are no longer taken directly from the receipts on that account, but are paid from the appropriation for post-office clerks pursuant to the act of June 29, 1886, the receipts to be turned into the Treasury as revenue, although diminished from the past year by the reduction in fees under the other act of June 29, 1886, will yet amount to \$630,000. The revenue for the current year is therefore thus estimated:

Taking the last year's ordinary postal revenue, less that for second-class matter	\$42, 498, 245 19
Add 7 per cent.....	2, 974, 877 16
Add last year's receipts for second-class matter	\$1, 099, 625 89
Increased by 10 per cent	109, 962 58
	<hr/>
	1, 209, 588 48
And estimated money-order revenue	630, 000 00
	<hr/>
Gives total estimated revenue	47, 312, 710 83

The appropriations for the year exclusive of the cost of the special-delivery service exceed this sum by \$7,053,152.42. But, with wise providence for the service, the Congress placed the amount of each of the thirty-six items beyond the probable expenditure, except as has been above indicated, and it cannot but result that the total expenditures will be less than the total appropriations. After a review of these items the prediction may be, I think, prudently ventured that the cash deficiency will be shrunk below \$6,000,000 if no change in the rule of payment to Pacific railroads occurs, and in view of a not improbably greater revenue than the estimated sum, and with continued economy of expenditure, a sensible lessening of even that figure may be hoped for.

The Estimate for the Coming Year, beginning July 1, 1887, becomes much more a matter of conjecture, as respects the revenue, and can be submitted but with many qualifications.

Assuming the probable continuance of flood tide in commercial and business prosperity, generally of more than two years' duration hitherto, the same ratio of increase in ordinary postal revenue may be fairly expected; the volume of second-class matter may probably advance 8 per cent., and the money-order business to yield somewhat more. Upon this basis the estimate was transmitted to the Secretary of the Treasury according to law, computed as follows:

The ordinary postal revenue of the current year, exclusive of receipts from second-class matter, as above estimated.....	\$45, 473, 122 35
With the addition of 7 per cent.....	3, 183, 118 56
The current year's revenue from second-class matter, as above estimated.....	\$1, 200, 588 48
Increased by 8 per cent.....	96, 767 07
	<hr/>
	1, 306, 355 55
Money-order revenue.....	650, 000 00
	<hr/>
Estimated revenue for 1888.....	50, 612, 555 44

The expenditures for the next year have a more trustworthy basis of estimation, being almost calculable in some particulars; and care has been taken to present the best judgment of the officers of the Department for such aid as may be thus afforded the Congress in determining the proper provision for the year. The total probable disbursements are estimated at \$55,342,150.15; a sum exceeding the estimated revenue by \$4,729,553.69, exclusive of the Pacific railroads' transportation service.

The purpose has been to limit these conjectures within prudent bounds, and with the hope that the revenues may be greater, the expenditures restrained, and the deficiency less. Whether the realization shall be pleasing, must await events.

The Details of the Financial Transactions during the past year are so elaborately described and explained in the accompanying reports of the Third Assistant and the Auditor, as to render nothing further necessary.

Attention is invited to the results secured by the methods pursued in making the contracts for supplies of adhesive stamps, postal cards, and envelopes, which were so fully discussed in the last annual report. There was manufactured and issued to postmasters a quantity of adhesive stamps exceeding by 10.2 per cent. the quantity of the previous year, but the actual cost was \$22,784.38, or 16.5 per cent., less than the expenditure of that year. The number of postal cards increased, on the like comparison, by 16,231,500, or 4.78 per cent., while the total cost thereof decreased by \$15,874.81, or 8.5 per cent. The registered package, tag, and official envelopes, manufactured and issued, increased by 32.7 per cent., but the sum of cost fell off \$17,731.05, or 19.6 per cent. Computing the difference in cost upon the quantities issued, the actual saving effected during the last year in these three articles of supply, was as follows:

Adhesive postage-stamps.....	\$35,076 84	or 23.3 per cent.
Postal cards	24,672 05	or 12.7 per cent.
Registered package, tag, and official envelopes.....	55,337 01	or 43.3 per cent.
Total.....	115,085 90	

A substantial reduction in the appropriations for the current year was warranted, and made accordingly.

The Contract for Stamped Envelopes, which has been in force four years, expired on the 30th day of September, 1886, and the making of another for a like period required and received much time and consideration, in order to secure the fittest envelopes for the public convenience, of the best materials, yet at the lowest prices attainable, and adequately to protect the Government in the various points of interest and risk affected. The Third Assistant has detailed the various steps taken and the governing reasons therefor with particularity, as not only presently interesting but of possible future value. Active

competition resulted in the making of a new contract, which is thought to be well guarded, with the former contractors at greatly reduced rates of cost, varying from a diminution of 11.1 per cent. for newspaper wrappers to 38 per cent. for third quality envelopes, the average lessened rate for envelopes being 27.2 per cent. The Third Assistant computes the saving in cost upon the probable issues during the contract term at \$942,298.19. This advantage does not accrue to the Department or the service, but to the public who purchase the stamped envelopes. Pursuant to the statute, a reduced price-list has been prepared, under which issues have been made since the first of October. The immediate demand has been great, overtaking the capacity of the manufactories; a satisfactory mark of the general popular approval of the work. Indirectly, the service is benefited in various ways by the use of stamped envelopes, and their extensive employment is desirable.

The contract for registered-package, tag, and official envelopes endures for but one year under the statutes. New proposals were invited at the same time with those for the stamped-envelope contract. But one bid was received, and I therefore ordered a new advertisement for proposals on another day. Four bids by other parties were proffered in response, each lower than the single one made upon the first advertisement, and the contract was let at a gain over it of \$8,836.57, or 10.1 per cent. The price is, however, at a marked advance over the contract of last year, owing, it is supposed, to rise in the price of material.

Letter-Sheet Envelopes have long been authorized by statute, and Postmaster-General Howe attempted their introduction in 1883 by making a contract with the owner of one of the many patents. The contractor failed to perform, and no further steps were taken to provide them until last year. A contract was made in October with the United States Sealed Postal-Card Company, the owner of a patent covering at least as good an envelope as any submitted to the Department, by which that company undertook to furnish, under provisions stipulating every security essential, such envelopes as the Department should require, wholly at the risk of the company, so that the Department receives them without cost, pays only for such as are sold, and sells at a price sufficient to return the full cost and all clerical service in addition to the face value of the stamp. The contractors are required to sustain the cost of transportation from the manufactory to the selling post-office.

Issues began in August and the envelope appears to find popular favor. The earlier manufactures were defective in the quality of paper and in the gumming, but the later articles are more satisfactory. The demand appears to increase, and the issues to the 1st of November instant amount to nearly three millions in number.

It appeared obvious that for certain uses this form of communication would be esteemed desirable, by the business public especially; that they might to some extent supersede postal cards and unsealed circu-

lars, and thus benefit the revenue, at the same time being lighter and more conveniently handled in the mails; and the existing contract, which is terminable at pleasure, was entered into experimentally, to prove the propositions by actual trial. Except by special authority of Congress a patented article of this kind cannot be purchased, but if, after sufficient further trial, the demand should prove considerable and the public convenience augmented by them, it would appear fairly obligatory, as well as expedient, to provide for supplies of letter-sheet envelopes, like stamped envelopes of other kinds. This would probably secure somewhat diminished cost, which would stimulate their use as well as cheapen them to the patrons of the service. To pursue that course it will be requisite to secure some one of the many patents in existence, if, indeed, it should not be found that a proper article for manufacture is unprotected, as is not improbable. The purchase price might be limited to a moderate figure, in view of certain competition, and the amount paid can soon be regained by assessment on the selling price of the envelopes. It was imposed as a condition on the present contractors that the Government should be at any time entitled to their patents at a price to be fixed by the Department, and the contract contains such a covenant. Longer experiment, however, would appear desirable before permanent action, especially in view of the favorable terms under which the supplies are now furnished. The novelty of them may have caused the demand heretofore, and present favor fail to endure.

The Registration Business marked the gaining prosperity and business activity of the year by an increase in the number of domestic letters registered of 340,467, or 4.3 per cent.; of 36,070, or 3.6 per cent., of domestic parcels; of 26,917, or 5.6 per cent., in foreign dispatched letters; of 7,089, or 19.8 per cent., of foreign dispatched parcels; and of 194,428, or 11 per cent., in Government dispatches sent free; with an increase of \$41,054.70 in fees collected, a gain of 4.2 per cent.

The registration service has been improved by the new system adopted during the year of placing a number of registered packages to be transmitted to the same post-office in a small sack, properly locked, and sent as one registered article, whereby unnecessary handling is avoided and greater security obtained.

The Dead-Letter Office continued during the last fiscal year the Division of Dead Letters under the third assistant, and its transactions for that period constitute one subject of his report. Separate provision, however, having been made by the Congress for this office, as recommended in the last report, it was accordingly established on the 30th day of July last as an independent Bureau of the Department under the above designation, and the efficient chief of the division appointed superintendent.

The performance of the functions of this division under that officer has been satisfactory. Improvement in methods has found place, the large arrearages of letters awaiting treatment have been cleared away, and daily treatment of the daily receipts has become the rule.

The appended report contains many figures so classified as readily to exhibit the work of the office. Its magnitude appears in the total number, 5,023,745, of pieces of mail matter treated during the year; an increase since the previous year of five per cent.

Letters and parcels were delivered to the proper parties unopened to the number of 186,448; and 366,379 foreign pieces were returned to the country of origin.

Of the letters opened, about one-half were destroyed as undeliverable and valueless, and the residue delivered or filed to await reclamation. Letters to the number of 12,138 containing money aggregating \$21,732, besides 18,105 letters containing drafts, checks, or other instruments for the payment of money of the total face value of \$1,121,154.74 were delivered to the owners.

The revenue derived from dead letters which could not be restored to owners, and from auction sale of unclaimed parcels, amounted to \$8,879.29.

Magazines, pamphlets, illustrated papers, picture cards, and the like, incapable of return, to the number of 16,164 pieces, were distributed to hospitals, asylums, and charitable institutions in the District of Columbia for the use of their inmates.

It is regarded as a testimony to improved condition and increased efficiency of the service that the ratio of increase in the volume of matter received at the Dead-Letter Office falls markedly below the ratio of increase in the volume of matter transported in the mails. Thus the statistical counts indicate an increase of 10 to 15 per cent. at least in the number of pieces of domestic matter mailed, to but 5 per cent. in that received at this office; and of foreign matter, an increase of 13 per cent. mailed, and a decrease of 7 per cent. in the number of pieces sent to the Dead-Letter Office for want of delivery. Domestic registered matter gained over 4 per cent., as has been seen, but the undelivered quantity decreased $2\frac{1}{2}$ per cent., and the undelivered foreign matter fell off over 9 per cent.

A comparison between our figures of last year and those of Great Britain affords a similar indication of the efficiency of our service. The number of undelivered letters turned into the British returned-letter offices (excluding such as bore the cards of senders and were returned direct) was 4,880,173; to the United States Dead-Letter Office, 4,680,669. Yet, as shown in the beginning of this report, the volume of our mails greatly exceeded the mails of great Britain.

THE INSPECTION SERVICE.

The extent of territory, the number of officials and employés, the complex machinery, and the magnitude of the interests of the postal service render the agencies by which information is secured for the management of its affairs and the enforcement of its discipline of the

first importance. The efficiency of the postal service so much depends upon the power of the inspection service that the condition of the latter is a gauge of the former. The inspectors are charged not only with the detection of depredators on the mails—the common acceptance of their duties—but with every inquiry arising from public complaint or the exigencies of the Department affecting casualties, losses, errors, breaches of discipline, the business of post-offices and other agencies, the character and competence of officials, and, indeed, all the affairs and interests of the service. The quick and accurate discernment and correct action of the Department essential to its power are, therefore, in great measure, limited by the qualities of these officers, and their selection, instruction, and *esprit du corps* have been objects of anxious care.

The report of the Chief of Inspectors, which is herewith submitted, gives a favorable account of the labors of the force during the year under review. At the beginning of it, the business was largely in arrear, the number of cases awaiting investigation being nearly equal to the average annual number investigated during two years before. Some of these had been so long delayed that the opportunity of satisfactory examination had passed away. They were sifted out and closed, and energetic diligence applied to the disposition of the remainder and the prevention of further accumulation from current business. In results, although 7,285 more cases were referred for inspection than during the previous year, the arrearages were substantially cleared away before the end of June, and no delays are now encountered in the business of the force.

The number of cases awaiting action on the 1st day of July, 1885, was 46,221, of which 11,967 were closed because lapse of time had rendered investigation useless or hopeless. Besides the remainder, 63,554 cases were referred for inspection during the year; yet, at the end of June, but 13,445 were under inquiry undisposed of, a number but little beyond current business. I extract from the report this summary contrast of the accomplishments of the past three years:

Fiscal year.	Cases referred.	Cases investigated.	Money recovered.	Cost of service.
1884.....	50,410	47,184	\$45,125 92	\$187,186 00
1885.....	56,269	51,219	73,555 87	199,239 57
1886.....	63,554	84,863	115,513 41	194,955 39

Cases for inspection have long been classified in the following manner:

Class A comprises depredations upon, delays and losses to, domestic registered mail matter.

Class B, complaints of similar kind concerning ordinary, or all other than registered mail.

Class F, complaints affecting foreign mail, including violations of custom and other laws.

Class C, miscellaneous cases of much variety, touching breaches of law or regulations by contractors, officers, clerks, and employés; the inspection of post-offices; the leasing of buildings; appointments; proposed establishment, discontinuance, or change of post-offices, post routes, free-delivery service, mail-messenger service; losses by fire, burglary, or otherwise; the responsibility of sureties on bonds; and many others.

During the past year there were of the first-named class 4,281 complaints received, and investigations were completed in 3,207 of them; the complaint found groundless in 1,956 cases; the cause of loss ascertained in 1,140; and in 111 no trace of the article nor cause of its loss was ascertained. In 543 cases the money was recovered or the loss made good by the responsible official. In but 708 cases, out of more than 11,000,000 registered articles transmitted in the mails, was actual and irreparable loss sustained.

Of Class B, 39,028 complaints were received during the year, in 29,257 of which investigations were completed; showing no loss in 7,687 cases, no trace in 8,413, responsibility on postal employés in 13,075, and 82 losses from inevitable accident. Only about one-third of complaints of this class involve loss of money or goods, and the pursuit is more difficult than in the registered class.

Of the foreign mail class there were 7,773 cases received, and of miscellaneous cases 13,544, a mere summary of the disposition of which would be of little significance. The Chief of Inspectors has minutely set forth by tables, arranged by States and Territories, interesting information of the results attained in all the cases made up during the year.

For violation of postal laws 660 persons were arrested, of whom 243 were in the service and 417 were not; 110 were postmasters, assistants, or clerks, 14 railway postal clerks, 24 letter-carriers, 27 mail-carriers, and 11 of various employment. Seventy-nine burglars and 31 former postmasters are included among the arrests outside of the service. The State courts took jurisdiction of 54 cases and the Federal courts of 606. Of the latter, convictions followed in 214, acquittals in 26, trial waits in 295, and the residue were dismissed or failed of indictment.

Post-offices were reported robbed to the number of 487, and 269 were burned; 76 postal cars were burned or wrecked; 27 mail stages and 7 mail-messengers or their wagons were robbed; 79 pouches lost, and 127 reported stolen or injured.

Attention has been at an earlier page invited to the cases of false returns of their cancellations by fourth-class postmasters, and the extent of the resulting losses to the Government. The evidence at hand indicates the expediency of increasing the inspection force for at least a single year sufficiently to enable a more extensive examination of these offices. All offices of the first and second classes, and many more, have

been inspected during the year, and the advisability of such examinations at no infrequent intervals, without awaiting special complaint, is assured by experience. The value of extending them to all offices will be great, not only in the prevention of peculation, but still more by the instruction of postmasters in their duties and the perfection of the discipline and methods of the service. The number of inspectors is now but 75, detailed for duty throughout our wide territory. Complaints requiring investigation must necessarily increase as the magnitude of the mails enlarges, and the demands upon the force are such as to require constant diligence, and afford no adequate opportunity for examination of fourth-class offices. The latter number now nearly 52,000, and to examine all would consume the labors of the entire corps for a year. It will be sufficiently arduous to satisfactorily investigate all the cases involving fourth-class offices to which suspicion is directed, and maintain the promptitude in dispatch of current business which is necessary. The Department solicits the assistance of the people in perfecting their postal service by stimulating criticism and complaint of every shortcoming on the part of their officers, and to meet the obligations imposed should be able to give every complaint quick inquiry.

If, therefore, such an inspection of the fourth-class offices as is suggested shall take place, some special provision must be made for the purpose. It will be, in my opinion, a measure of economy, and productive of saving many times its cost, besides incidental advantages well worth the comparatively insignificant outlay.

It is respectfully advised that the attention of the Congress be particularly asked to the subject, and an additional appropriation of \$100,000 be made for the coming year, to enable the employment for that period of an increased force of inspectors and the careful inspection of the greater number of the post-offices in the country.

The chief of inspectors commends the established practice of offering rewards for the detection of mail robbers and post-office burglars, and attributes to it, in good share, the success of the corps in the capture of these criminals, to which is probably due the decrease he mentions in the number of such offenses. His recommendation that the use of \$10,000 be authorized for such purpose should meet with favor.

GENERAL TOPICS.

Allowances to Third-Class Postmasters.—The unequal operation of existing law upon postmasters of different classes has recently occasioned agitation and furnished the basis of an appeal to the Congress for relief, and of complaints to the Department.

As previously mentioned, postmasters of the first and second classes are supplied with twine, wrapping paper, letter-balances, scales, and stationery, as well as business blanks, canceling-ink, stamps, and pads

for marking mail matter, which latter only all offices may receive; and are likewise allowed the cost of their office rents, fuel, light, clerks, furniture, and miscellaneous and incidental expenses, which others are totally denied. The allowance to such third and fourth class offices as perform separating or distributing service, of the hire of clerks for that peculiar and additional labor only, does not relieve their ordinary expenses, nor much qualify the effects of the discrimination against them.

Thus, as the law stands, postmasters of the first and second classes are given their prescribed salaries free of diminution, while a third-class postmaster does not receive the salary promised by the law, but so much of it only as remains after payment of all the expenses of his office. The consequences are, first, injustice, more or less, to all postmasters of the third class, and frequent instances of grotesque inequality and unfairness in the proportion of labor and responsibility to net compensation; and, secondly, a resulting tendency to poorer provision and service in such offices, only counterbalanced by the pride and sense of duty of the officer.

Salaries of the third class vary from \$1,000, where gross receipts are \$1,900 and not exceeding \$2,100, to \$1,900 where gross receipts reach \$7,000, but not over \$8,000; and immediately following, salaries of the second class rise from \$2,000 for gross receipts of \$8,000 and not over \$9,000, to \$2,900 for gross receipts of \$35,000 or more, not exceeding \$40,000. Thus, if the business of an office be between \$7,900 and \$8,000, the postmaster must bear the entire charges of it, and have for himself only what shall be left of \$1,900; while if the business be but an hundred dollars more, the postmaster may take \$2,000 net for his services, and these often more of mere supervision than of actual office work. Instances have come to my attention where third-class postmasters with salaries of but \$1,600 to \$1,700 have been compelled, in order to provide such service as to satisfy their sense of personal honor in performance of public duty, to make an annual outlay of from \$1,000 to \$1,300, besides giving continuing personal labor. It is obvious, indeed, that so great is the difference between the decent provision of an office for the transaction of postal business yielding annually \$7,000 or more, and one yielding but from \$1,900 to \$2,100, it may be almost affirmed that as a third-class postmaster's business and salary increase, his compensation diminishes; and it is to be safely asserted that, in a large majority of cases at least, his *proportionable* compensation (to labor and responsibility) will surely diminish if he fairly discharges his obligations to the service. Such a condition is neither creditable to the justice of the Government nor wisely conducive to the finished service which should be exacted of postmasters to the public.

Postmasters are nominally apportioned by the law into four classes; but the practical division is into two, so far as concerns their allowances and supplies; and again into two, by another line, as concerns their appointment and tenure.

A fair survey of the subject seems to indicate a more natural division into three general classes. The one comprises those who respectively serve limited populations and whose business is not so large as to require more than a share of the space in some apartment, put by the postmaster to some other use of his own, as a store, shop, professional office, or room in a dwelling; nor to require more personal service than he can alone render if he gives a portion of his time. Such an office yields in rentable value comparatively little, and that out of what he would substantially otherwise provide for himself; in fuel and light but a like moderate share of his own provision; and in clerical service nothing but what he chooses to provide in substitution for his own. For all these he receives, in the large commissions allowed to fourth-class postmasters, a sufficient compensation, and not infrequently he derives incidental gain from the attraction of citizens to his place of private business on their post-office errands.

The next class comprehends but the limited number of offices at which the volume of business is so great that a general superintendent, who performs none of the labor of details, is necessary to conduct and govern the force employed by the Government for the transaction of the postal affairs. Offices of this class should be provided, furnished, supplied, and its subordinates paid by the Government, while the postmaster receives a salary correspondent to the responsibility and care devolved upon him. The first-class offices and the higher grades of the second class, those, perhaps, whose gross receipts are \$25,000 and upwards, fall within the suggested category.

The remaining division embraces those offices which lie between, whose business is sufficient in amount, and whose supporting population of such numbers, that a proper consideration requires an office exclusively set apart for the postal service, and some clerical assistance to the postmaster in the performance of his duties, yet where he ought to perform in person a portion of such duties, as well as bestow the necessary supervision over all. The rent and supplies of such an office, as well as the necessary clerical force to assist the postmaster, are a proper charge upon the Department, and his salary should be graduated according to the business, the personal service expected of him, and the responsibilities imposed.

It seems that a division of post-offices into classes, based upon the amount of business done, with allowances accordingly, and with salaries graduated to the duties and burdens imposed on the postmaster, would be more natural and just than the present classification, which proceeds on the number of thousands paid to the postmaster, computed upon an arbitrarily graduated scale of commissions. Doubtless, a perfect proportion between compensation on the one hand, and duty and responsibility on the other, cannot be maintained through the entire range. But it appears possible to approximate it more nearly than by the pres-

ent method. Reduction in some salaries as now fixed is as justly due as are allowances to some officers who now pay from their salaries expenses fairly belonging to the Government. Probably the Department's share of cost should not be, in the total, much more than it now is; but however that shall eventuate upon a just examination, the amount now appropriated for salaries and allowances to Presidential offices might be more justly distributed. To realize the best results will, however, demand such change in the existing statutes relating to the first, second, and third classes, and perhaps require such experience of trial, that it may be deemed wiser to take steps in the beginning which shall partially relieve the inequalities mentioned and at the same time tend in the direction of desirable ultimate arrangement.

In this view, it may now be suggested that at least offices of the third class, whose gross receipts reach three thousand five hundred dollars or more, are generally of such consequence as to properly require an apartment exclusively employed for the service, and some clerical service in addition to the postmaster's; and that such offices should be leased by the Government, allowances for fuel, light, and clerks, to an amount, with salary, not in excess of box-rents and commissions should be permissible. This maintains the same limitation which is placed on the first and second class offices, and affords proportionable assistance by the same rule.

The following table shows the gross and average receipts, box-rents, commissions, allowances, and surplus at the third-class offices ranging from \$1,500 to \$1,900 in salary.

Statement showing the number of offices, aggregate gross receipts, box rents, box rents and commissions, salaries of postmasters, allowances for separating labor, surplus and excess box rents and commissions, for each grade from \$1,500 to \$1,900, inclusive.

Grade.	Number of offices.	Aggregate gross receipts four quarters ended March 31, 1886.	Aggregate box-rents four quarters ended March 31, 1886.	Aggregate box-rents and commissions, four quarters ended March 31, 1886.	Aggregate salaries of postmasters July 1, 1884.	Aggregate allowances for separating labor.	Aggregate surplus, box-rents and commissions.	Aggregate excess, box-rents and commissions.
\$1,500.....	242	\$20,857	\$4,368	\$148,836	\$663,000	\$49,390	\$44,757	\$3,772
1,600	178	407,492	78,061	382,265	241,800	43,292	57,103	2,936
1,700.....	173	947,857	100,829	436,489	204,100	58,732	88,660	1,073
1,800	116	750,823	84,385	335,481	208,800	51,172	75,809	382
1,900.....	62	458,768	40,037	109,225	117,800	35,535	45,890	.. ..
Grand totals.....	771	2,885,864	412,680	1,801,276	1,268,500	238,130	307,309	12,617

Average amounts for each grade, from \$1,500 to \$1,900, inclusive, compiled from the above table.

Grade.	Number of officers.	Average gross receipts, four quarters ended March 31, 1884.	Average box-rents, four quarters ended March 31, 1884.	Average box-rents and commissions, four quarters ended March 31, 1884.	Average salaries of postmasters, July 1, 1884.	Average allowances for separating labor.	Average surplus box-rents and commissions.	Average excess box-rents and commissions.	Average gross receipts per grade.	Average expense per grade, salary and allowance.	Per cent. of gross receipts absorbed for expenses (average).
\$1,500 ...	242	\$3,805 73	\$389 99	\$1,434 89	\$1,500	\$204 95	\$184 95	\$34 18	\$3,800	\$1,705	44.8
1,600	178	4,536 19	438 54	2,147 56	1,600	243 21	320 80	16 41	4,536	1,843	40.8
1,700	173	5,478 94	617 51	2,517 16	1,700	339 49	483 53	5 91	5,478	2,039	37.2
1,800	116	6,473 63	727 48	2,892 08	1,800	441 14	654 30	3 38	6,473	2,241	34.6
1,900	62	7,399 24	790 94	3,213 31	1,900	573 15	740 16	.....	7,399	2,473	33.4

The Government would be the gainer in money if somewhat lower limitation were fixed, graduated by business, upon offices whose gross receipts range from \$3,500 to \$20,000; the service would not be impaired, and a fairer proportionable dealing would be established.

Fourth Class to Presidential.—The statute prescribing when a fourth-class office shall become Presidential requires an additional modifying condition, in order to prevent what may be termed the sawing of an office between the two classes. As it now stands the Auditor must report, and the Department assign to the third class, some offices during a fiscal year which at the end of it must be relegated to the fourth class; with liability to a renewal of the transmigration in the following year. As a new appointment is legally necessary at each such change, requiring once confirmation by the Senate, and involving each time a new bond by the postmaster, the inconvenience then becomes vexatious. Two such cases happened during the last year. The difficulty arises because the box-rents and commissions to a fourth-class postmaster will often yield him over \$250 per quarter during the year, although his gross receipts do not sum up \$1,900 for the year; and the office cannot remain in the third class, under the statute, unless the latter be also the case. Consult the foregoing table for illustration.

The insertion in the first proviso of the second section of the act of March 3, 1883 (22 Statutes, 602) of an additional condition upon the Auditor's reporting a case, to the effect that the returns shall show gross receipts for the four preceding quarters of \$1,900 or more, would apparently relieve the defect in the law. Nor would it impair the postmaster's income, because the Auditor must continue to allow him in the case supposed the same compensation while such an office remains in the fourth class, which would be fixed as his salary upon declaring the office Presidential.

The Washington Post-Office is occupied by the Government as a tenant holding over, the lease of the premises having expired on the 16th day of November, 1884. The rental is \$5,000 per year. The sundry civil act, approved March 3, 1885, made appropriation for payment of the rent at that rate until the 30th of June, 1886. The Congress omitted appropriation, no doubt inadvertently, at the late session, and provision may be expected when its attention shall be called to the subject. It would seem prudent to provide for a continuing lease for a term of years.

A branch of the Washington post-office was some years ago established on F street northwest, and is known as Station C. Inquiry has disclosed to me that no lease has ever been made of the property, but that it is maintained by an allowance to F. A. Brown, jr., of \$2,320 per annum as a superintendent or clerk, for which he furnishes the apartment, himself paying the owner an agreed rental of, as I am informed, \$300 per year. The station is a useful public convenience, and should be at least maintained, if not enlarged; nor perhaps could it be more economically supported. But the method of its establishment and continuance is not free from a question of irregularity, inasmuch as the act of June 22, 1874, forbade contracts for renting any public building in Washington, not at that time in use by the Government, until after an appropriation therefor by the Congress; the spirit of which, at least, is unambiguous and plain. It would appear a proper subject for direct Congressional disposition; and it is to be hoped this will result in a more commodious station.

The Official Postal Guide has become an indispensable means of periodically communicating to the vast force of officials who man the postal service much of the current information and instruction necessary to the right performance of their duties, as well as of utility to the general public. Its history and the Department's experience suggest the gains which might be secured by appropriate legislation upon the subject.

The publication appears to have first become a charge upon the Department under a provision in the sundry civil act of June 23, 1874, that authorized a contract for a quarterly publication, in magazine form, limited to 30,000 copies, for a period of five years. Postmaster-General Marshall accordingly contracted with H. O. Houghton & Co., of Cambridge, Mass., to publish it at an agreed price per copy for such as were furnished the Department, varying according to the numbers ordered and the matter inserted, requiring the contractor to edit it, and allowing him the privilege of selling copies to the public and of a limited number of pages for advertisements; the Department paying the charges of wrapping the copies mailed to its officials, fixed at three-quarters of a cent per copy; and the Guide was so published until June, 1879. The contract was then renewed for one year from the first of

July, for a monthly publication of the general character of the present, of which 45,000 copies were to be furnished, at the price of \$11,250 for the annual Guide, or January number, not exceeding 600 pages, and \$800 for each monthly number of not more than 36 pages; and it was stipulated that additional matter should be paid for at a discount of not less than 50 per cent. from the contractor's "regular advertising rates"—a pregnant provision.

From that time a contract, generally similar in terms, was annually renewed with the same firm, or its successors, Houghton, Osgood & Co. and Houghton, Mifflin & Co., until the 30th of June, 1885; the chief variations being in the price per copy and in the number of copies required, the latter gradually rising as the requirements of the service enlarged. In making the contract for the year ending June 30, 1885, competition was for the first time, so far as appears from the Department files or records, invited from publishers, by sending to a limited number letters of invitation to bid; but the contract was awarded to the same contractors as before. A change was made in its terms by requiring the publisher to wrap and mail the issues to the officials of the service, and by the Department's assuming its editorial preparation. In consequence of the latter, the contractors proffered to furnish 60,000 copies, at 27 cents per copy for the annual and 1½ cents for the monthlies.

During several years the size of the monthly numbers was swelled and the cost greatly enhanced by the insertion of matter, under the advertisement-rate clause, as will appear from the table given below; which led to the direction, in the departmental appropriation act for the year 1883, that "hereafter the annual report of the Postmaster-General shall not be published in said Official Postal Guide."

In anticipation of the contract for the year ending June 30, 1886, a letter of invitation for bids was directed to be addressed to the principal publishing houses of the country, so far as known, which awakened such competition that the annual Guide, limited to 800 pages, and the monthlies, limited to 36 pages, exclusive of advertisements, were furnished by Callaghan & Co., of Chicago, at the prices per copy of 11 cents for the former and 1 cent for the latter, all expenses of wrapping and addressing being borne by the contractors. As theretofore a limited amount of advertising, subject to censorship of the Department, and the product of sales to the public, were permitted to the contractors. The following table exhibits in convenient form the principal figures of previous years' experience:

Year ending June 30—	Number of copies bought.		Price per copy.		Minimum number of pages.	Extra pages at ad- vertising rates.	Number of post- offices.	Cost of Guides.	Cost of extra pages at advertising rates.	Cost of wrapping.
	Annual.	Monthly.	Annual.	Monthly.						
			Cents.	Cents.						
1875....	160,000		121		400		25,547	\$19,050 00		\$69 2
	215,000		117							
	280,000		113							
1876....	100,000		121		400		26,383	18,200 00		72 7
	410,000		114							
1877....	130,000		121		400		27,315	19,123 41		120 3
	411,000		119							
	720,000		117							
1878....	283,100		119		400		29,258	19,170 00		130 7
	720,000		117							
1879....	284,100		119		400		40,835	19,280 00		262 2
	219,250		117							
1880.....	53,704	470,397	25	.01½	336	332	42,980	21,784 49	\$12,450 00	2,182 3
					7024					
1881.....	41,880	530,516	25	.017½	336	483	44,512	20,000 00	16,312 50	2,712 7
					7124					
1882....	52,800	555,433	25	.017½	336	544	46,231	22,887 81	20,387 50	2,600 2
					7674					
1883.....	60,000	683,388	27	.015½	336	601	47,883	25,300 25	24,787 24	2,919 7
					7174					
1884 ...	61,000	600,783	27	.015½	336	46	50,017	25,935 04	1,725 00	2,267 0
					7024					
1885	65,050	632,737	27	.01½	336	11	51,262	20,421 69	412 50	
					7800					
1886.....	62,700	666,160	11	.01	336		58,504	13,708 00		
					7800					

¹ Quarterly number, with list of offices by counties.

² Quarterly number, without list of offices by counties.

³ Quarterly number, without list of offices by counties, where order was or exceeded 20,000 copies.

⁴ Quarterly number, without list of offices by counties, where order exceeded 20,000 but was less than 30,000 copies.

⁵ Quarterly number, with list of offices by counties, where order for 40,000 copies or over.

⁶ Monthly.

⁷ Annual.

Year ending June 30—	Total for year.	Total appropria- tion.	Balance unex- pended.	Expendi- ture in excess of appropria- tion.	Remarks.
1875	\$19,703 67	\$20,000 00	\$296 33		
1876	18,924 79	20,000 00	1,075 21		
1877	19,912 68	20,000 00	87 32		
1878	19,923 70	20,000 00	76 30		
1879	19,905 75	20,000 00		\$23 25	
1880	36,427 08	20,000 00		16,427 08	Paid from appropriations for advertising and wrapping paper.
1881	39,032 25	20,000 00		19,032 25	Do.
1882	40,075 39	23,000 00		23,075 39	Do.
1883	53,016 88	26,500 00		26,516 88	Do.
1884	30,579 73	20,000 00		1,579 73	Do.
1885	26,844 19	20,000 00	2,163 81		
1886	\$13,708 60	20,000 00	15,291 40		

⁸ Includes \$150 paid for binding 600 copies in cloth. For previous years this could not be shown, vouchers being incomplete.

Bids for the contract for the current fiscal year were invited from the principal publishing-houses, and the contract awarded to Houghton, Mifflin & Co., the lowest bidders, at 15 cents per copy for the annual and 1 cent for the monthly Guides, the terms being otherwise substantially unchanged.

The recounted experience of the last two contracts not only indicates unnecessary expenditure during former years, but suggests the possi-

ble advantage of somewhat better methods in the future. The publisher derives considerable gains from the pages allowed for advertisements and from sales of the annual Guide to the public. These will be greater sources of profit if his rights as publisher are secure for a long term. On the other hand, the publication requires so considerable a stock of printers' material and machinery to produce with promptitude the large number of copies demanded, that competition for a single year's contract is much limited. On both sides evident reasons manifest the advantages to the publisher of a long contract, and therefore the probability of a better price to the Government for the copies it requires. There is good reason to believe that the contract price for the current year could be abridged by one-quarter to one-third if a term of eight or ten years were offered to the successful competitor, and at the same time every necessary provision be made for the probable changing needs of the Department during its continuance. It would be at once a measure of economy to the Government and of fairness to the contractor.

A Fourth Assistant Postmaster-General was recommended in the report of last year, and reference is again made to the reasons then suggested in favor of providing such an officer. Additional experience in the Department adds confirmation to the opinion expressed. No private business well conducted, of far less magnitude, would long want such an official. The Government should save many times his salary within a year by the retrenchments in expense which his steady superintendence might enforce. The heavy duties of the present officers leave it possible only to see what might be accomplished in many features, if time were afforded for the requisite constancy of labor and study. I commend the reading of Postmaster-General Howe's piquant report for 1882 on the distribution of salaries and allowances in this connection.

The Department.—The following table exhibits the expenditures of the Department during the fiscal years 1885 and 1886.

Table showing appropriations, expenditures, and unexpended balances of appropriations for objects pertaining to the care of the Post-Office Department building, for the conduct of the Departmental service, and for salaries of officers and employes of the Department; also amount and rate of decrease of expenditures for 1886 as compared with 1885.

Items.	Year ended June 30, 1886.			
	Appropriations.	Expenditures.	Balances unexpended.	
			Amount.	Per cent.
Stationery	\$9,000 00	\$8,349 00	\$2,651 00	29.4
Fuel, &c.	7,200 00	6,817 34	382 66	5.31
Fuel, &c., additional building.	1,800 00	436 60	563 40	68.4
Gas.	6,600 00	4,933 11	1,666 89	25.25
Gas, additional building	400 00	400 00	-----	-----
Plumbing and gas-fixtures.	4,700 00	3,634 30	1,065 70	22.6
Telegraphing.	5,000 00	2,320 79	2,679 21	53.58
Painting.	4,700 00	2,407 56	2,292 44	48.7
Carpets and matting.	5,900 00	3,570 60	2,329 40	39.14
Furniture.	7,500 00	1,366 71	6,133 29	81.77
Furniture, additional building.	500 00	17 00	483 00	96.6
Keeping horses, &c.	1,500 00	987 97	512 03	34.1
Hardware	1,700 00	534 81	1,165 19	68.5
Miscellaneous items	13,000 00	10,897 93	2,102 07	16.16
Miscellaneous items, additional building	500 00	114 50	385 50	77.1
Rent, topographers	1,500 00	1,500 00	-----	-----
Rent, Money-Order building	8,000 00	8,000 00	-----	-----
Rent, additional building	4,500 00	4,125 00	375 00	8.3
Official Postal Guides	29,000 00	13,708 60	15,291 40	52.7
Post-route maps	20,000 00	16,990 04	5,261 96	23.78
Realized from sale of post-route maps	*2,252 00	-----	-----	-----
Foreign postage	500 00	448 50	51 50	10.3
Free penalty envelopes	3,600 00	1,533 89	2,066 11	57.3
Total of items pertaining to care of building, &c.	138,852 00	91,094 25	47,757 75	34.39
Salaries of officers and employes of Post-Office Department.	715,120 00	697,675 50	17,444 50	2.4
Total of all the above.	853,972 00	788,769 75	65,202 25	7.68

* By law credited as a further appropriation.

Items.	Year ended June 30, 1885.				Decrease of ex- penditures of 1886 as com- pared with 1885.	
	Appropriations.	Expenditures.	Balances unex- pended.		Amount.	Per cent.
			Amount.	Per cent.		
Stationery	\$9,000 00	\$8,913 30	\$86 70	.96	\$2,564 30	28.7
Fuel, &c.	7,200 00	7,032 07	167 93	2.33	214 73	3.0
Gas.....	6,600 00	5,331 94	1,268 06	19.2	398 83	7.4
Plumbing and gas fixtures.....	4,700 00	4,692 49	7 51	.16	1,058 19	22.5
Telegraphing.....	5,900 00	2,880 93	3,019 07	51.1	560 14	19.4
Painting.....	4,700 00	4,662 22	37 78	.8	2,254 66	48.3
Carpets and matting.....	5,900 00	5,376 61	523 39	8.8	1,806 01	33.5
Furniture	7,500 00	6,340 02	1,159 98	15.4	4,973 31	78.4
Keeping horses, &c.....	1,500 00	1,064 51	435 49	29	76 54	7.1
Hardware	1,700 00	1,601 22	98 78	5.8	1,066 41	66.5
Miscellaneous items	13,500 00	13,500 00	.....	.....	2,602 07	19.2
Rent, topographers	1,500 00	1,500 00	.....	.....	.....	.....
Rent, Money-Order building	8,000 00	8,000 00	.....	.....	.....	.....
Official Postal Guides.....	29,000 00	26,421 63	2,578 31	8.89	12,713 09	48.1
Post-route maps	20,000 00	21,064 25	154 90	.73	4,074 21	13.3
Realized from sale of post-route maps.....	*1,219 15					
Total of items pertaining to care of Department, &c	127,919 15	118,381 25	9,537 90	7.45	27,287 00	23.0
Salaries of officers and employes of Post-Office Department.....	696,480 00	690,267 62	6,212 38	.89	17,407 88	11.0
Total of all the above.....	824,399 15	808,648 87	15,750 28	1.9	19,879 12	2.4

* By law credited as a further appropriation.

† Increase.

The diminishment in expenditures during the last year took place without diminishment of any proper provision for the comfort or health of the clerks employed. Indeed, many improvements have been made much contributing to both. The plumbing and gas-fitting of the Department building were seriously defective, and have been renovated with good effect, and attention has been given to render the place of daily labor of the departmental force as cleanly, comfortable, and agreeable as the building will admit. Especial commendation is due the chief clerk and the superintendent for the excellent results accomplished and the economy in expenditure.

The Money-Order Building was leased for five years from the 1st day of October, 1882, at \$8,000 per year. As the term expires during the coming year, and the room space now in use is indispensable, it becomes necessary to solicit from the Congress some new provision, either by a lease of the same or some other building.

It is no longer a matter of foresight that enlargement of the Department building or the construction of a new one has become a duty. Three buildings in addition to the Department proper are now rented for its service, at an annual cost of \$14,000; and before the probable completion of a new structure their capacity will have been outgrown.

I wish to avoid every perfunctory phrase, but to express in terms intense with sincerity my gratitude to the assistants and heads of bureaus and offices, the chief clerk and chiefs of divisions of this Department for their loyal and efficient co-operation, counting no hours and sparing no personal inconvenience to promote the common object intrusted to our care. Fidelity and attention have been conspicuous among the clerical force, and the corps of inspectors has well earned acknowledgment of their diligent and valuable service. The justifiable pleasure with which the improving condition of our postal administration is now exhibited to you is the joint possession of all these officers whose patriotic labors have wrought for its accomplishment.

WILLIAM F. VILAS,

Postmaster-General.

The PRESIDENT.

PAPERS

ACCOMPANYING

THE REPORT OF THE POSTMASTER-GENERAL

REPORT OF THE FIRST ASSISTANT POSTMASTER-GENERAL.

POST-OFFICE DEPARTMENT,
OFFICE OF THE FIRST ASSISTANT POSTMASTER-GENERAL,
Washington, D. C., October, 20, 1886.

SIR: I have the honor to submit the following report of the work of this Bureau for the year ended June 30, 1886.

APPOINTMENT DIVISION.

Statement showing the number of post-offices established and discontinued, the number of postmasters appointed, and the increase or decrease as compared with the previous year.

Post-offices.	June 30, 1885.	June 30, 1886.	Increase.	Decrease.
Number of post-offices established during the year ..	2, 121	3, 482	1, 361	.....
Number of post-offices discontinued	886	1, 120	234	.....
Net increase over previous year	1, 235	2, 362	1, 127	.....
Whole number of post-offices	51, 252	53, 614	2, 362	.....
Number filled by appointment of the President.....	2, 233	2, 244	11	.....
Number filled by appointment of the Postmaster-General.....	49, 019	51, 349	2, 330	.....

Appointments made during the year.

Appointments.	June 30, 1885.	June 30, 1886.	Increase.	Decrease.
On resignations and commissions expired.....	6, 204	9, 112	2, 908	.....
On removals and suspensions.....	810	9, 566	8, 756	.....
On deaths of postmasters	412	587	175	.....
On establishment of new post-offices.....	2, 121	3, 482	1, 361	.....
Total	9, 547	22, 747	13, 200	.....

Total number of appointments during the year..... 22, 747
Number of post-offices discontinued

Names and sites changed with retention of incumbents 589

Total number of cases acted upon during the year..... 24, 456

The above statements show that the number of post-offices established the past year was 3,482, an increase of 1,361 over the number established the previous year; also that the number of offices discontinued was 1,120, an increase of 234 over the number discontinued the previous year.

The extraordinary increase in the number of post-offices established the past year was, in a great measure, due to the fact that a large number of applications for offices filed in the latter part of the previous year were left over and acted upon during the past year. The increase and decrease in the number of offices, arranged by sections, States, and Territories, were as follows :

New England States.

	Increase.	Decrease.	Net increase for 1886.	Net increase for previous year.
Maine	16	.....	.....	.....
New Hampshire	5	.....	.....	.....
Vermont	4	.....	.....	.....
Massachusetts	22	.....	.....	.....
Rhode Island	1	1	.....	.....
Connecticut	4	.....	.....	.....
Total	51	1	50	48

Middle States and District of Columbia.

	Increase.	Decrease.	Net increase for 1886.	Net increase for previous year.
New York	58	.....	.....	.....
New Jersey	22	.....	.....	.....
Delaware	7	.....	.....	.....
Maryland	66	.....	.....	.....
District of Columbia	1	.....	.....	.....
Pennsylvania	107	.....	.....	.....
Total	261	.....	261	111

Southern States and Indian Territory.

	Increase.	Decrease.	Net increase for 1886.	Net increase for previous year.
Virginia	197	.....	.....	.....
West Virginia	75	.....	.....	.....
North Carolina	193	.....	.....	.....
South Carolina	47	.....	.....	.....
Georgia	121	.....	.....	.....
Florida	90	.....	.....	.....
Alabama	96	.....	.....	.....
Mississippi	97	.....	.....	.....
Louisiana	57	.....	.....	.....
Texas	146	.....	.....	.....
Arkansas	85	.....	.....	.....
Missouri	68	.....	.....	.....
Tennessee	70	.....	.....	.....
Kentucky	85	.....	.....	.....
Indian Territory	17	.....	.....	.....
Total	1,444	.....	1,444	638

The three States and Territories of the Pacific slope.

	Increase.	Decrease.	Net increase for 1886.	Net increase for previous year.
Oregon	33	.....	.....	.....
California	59	.....	.....	.....
Nevada .....	.....	2	.....	.....
Washington	21	.....	.....	.....
Arizona .....	.....	6	.....	.....
Alaska	1	.....	.....	.....
Total	114	8	106	65

The ten States and six Territories of the West and Northwest.

	Increase.	Decrease.	Net increase for 1886.	Net increase for previous year.
Ohio	38	.....	.....	.....
Indiana	23	.....	.....	.....
Michigan	44	.....	.....	.....
Illinois	41	.....	.....	.....
Wisconsin .....	.....	6	.....	.....
Iowa	25	.....	.....	.....
Minnesota	13	.....	.....	.....
Kansas	107	.....	.....	.....
Nebraska	74	.....	.....	.....
Colorado .....	.....	16	.....	.....
Dakota	86	.....	.....	.....
New Mexico	22	.....	.....	.....
Montana	16	.....	.....	.....
Wyoming	12	.....	.....	.....
Idaho	23	.....	.....	.....
Utah .....	.....	.....	.....	.....
Total	523	22	501	37

It will be observed that the greatest increase in the number of offices in any of the States and Territories the past year was 197 in Virginia, though North Carolina followed close, with 193, and Texas with 146. The largest increase the previous year was 100 in Virginia.

The decrease the past year was 16 in Colorado; 6 in Arizona; 6 in Wisconsin; 2 in Nevada, and 1 in Rhode Island.

The six States having the largest number of post-offices June 30, 1886, were as follows: Pennsylvania, 4,001; New York, 3,215; Ohio, 2,763; Virginia, 2,281; Illinois, 2,229; and Missouri, 2,057.

By the annual adjustment of the salaries of postmasters, 45 offices of the third class were relegated to the fourth class, and 24 offices of the fourth class were assigned to the third class, leaving 2,244 Presidential offices in operation June 30, 1886.

As heretofore, New York had the largest number of offices of this grade, 216; following were Illinois, with 176; Pennsylvania, 159; Ohio, 133; Massachusetts, 121, and Iowa, 120. The greatest increase in such offices was seven each in Nebraska and Kansas.

The total number of money-order offices at the close of the fiscal year was 7,356, an increase of 287 over the previous year. Of the whole number of offices of this class, Illinois had the largest number, 590. Following were: Iowa, with 522; New York, 496; Ohio, 468; Pennsylvania, 402; Michigan, 344; Kansas, 342; Indiana, 315; Missouri, 213; and Wisconsin, 271. The greatest increase in any State was 25, in Kansas.

The number of postmasters appointed during the year was 22,747, while the total number of cases acted upon, including the discontinuances and names and sites changed with the retention of the incumbents, was 24,456. Compared with the previous year, there was an increase of 2,908 in the number of appointments on resignations and commissions expired, of 8,756 on removals and suspensions, of 175 on deaths of postmasters, and of 1,361 on establishment of post-offices.

The number of postmasters who died during the year was 587.

The increase in the number of cases passed upon was 13,253 over the previous year.

For further information relative to the establishment, discontinuance, and change of names and sites of post-offices and the appointment of postmasters, reference is made to tables marked A and B appended to this report.

BOND DIVISION.

To this division is assigned the duty of recording in proper form the appointments of all postmasters, whether made by the President or the Postmaster-General; the establishment, discontinuance, and changes of names and sites of post-offices, and the preparation and transmission of the necessary letters of appointment, together with blank bonds and oaths to be executed by all newly-appointed postmasters. Upon the return of these bonds and oaths, duly executed, they are carefully examined, and, if found correct, the bonds are submitted to the Postmaster General for approval, after which the names of the sureties are recorded, the postmasters' commissions prepared and transmitted, and the bonds and oaths filed in their proper order.

Of all these transactions full and complete reports are made daily or weekly to the various branches of the Department proper and to the Auditor for the Post-Office Department.

In addition to the foregoing is the preparation, examination, recording, reporting, and filing of all new bonds required for various causes, and a vast amount of correspondence with postmasters and the general public.

The amount of business transacted during the year was unprecedentedly large, in consequence of the great number of appointment cases handled, and of new bonds required by order of the Postmaster-General.

The official order (No. 120) of the Postmaster-General, issued May 21, 1885, has been executed, every postmaster of the fourth class who had remained in office for five years from the date of the taking effect of his latest official bond, having been called upon to furnish a new bond.

The number of postmasters required under the said order to renew their official bonds was 14,063, or about 27 per cent., distributed among the States and Territories as follows:

State.	No.	State.	No.
Alabama	476	Montana.....	28
Arizona	10	Nebraska.....	176
Arkansas.....	195	Nevada.....	15
California.....	319	New Hampshire.....	235
Colorado.....	71	New Jersey.....	200
Connecticut	151	New Mexico.....	21
Dakota	146	New York.....	817
Delaware	54	North Carolina	662
Florida	97	Ohio	551
Georgia.....	382	Oregon	108
Idaho.....	19	Pennsylvania.....	1,410
Illinois	468	Rhode Island	39
Indiana.....	524	South Carolina.....	267
Indian Territory.....	16	Tennessee	552
Iowa	388	Texas	256
Kansas	317	Utah	70
Kentucky	425	Vermont.....	232
Louisiana.....	156	Virginia	620
Maine	497	Washington	65
Maryland.....	354	West Virginia.....	399
Massachusetts.....	344	Wisconsin.....	466
Michigan.....	411	Wyoming.....	5
Minnesota.....	399		
Mississippi	239		
Missouri.....	462		
		Total	14,063

Eleven thousand three hundred and forty-five, or 80.6 per cent. of those called upon, have furnished the required new bonds, and the same have been accepted, recorded, reported, and filed. The number failing or declining to meet the requirement was 2,718.

The following table is designed to show the work done by this division, in so far as it is susceptible of tabulation:

A statement of the operations of the Bond Division for the fiscal year ended June 30, 1886.

Number of Presidential cases recorded and upon which appointment papers, bonds, &c., were mailed	1,600
Number of cases of the fourth class recorded and upon which appointment papers, bonds, &c., were mailed	23,521
Number of appointment bonds examined, indorsed, and submitted to the Postmaster-General for approval	21,091
Number of bonds returned for correction	4,057
Number of appointment bonds filed	21,091
Number of new bonds required under the Postmaster-General's order of May 21, 1885	14,063
Number of new bonds required upon request of surety to be released	501
Number of new bonds required at the instance of the Third Assistant Postmaster-General	121
Number of new bonds required upon recommendations of post-office inspectors	127
Number of new bonds required in consequence of the extension of the money-order business	562
Number of new bonds sent upon requests from postmasters	497
Total number of new bonds required	15,871
Number of new bonds received, examined, indorsed, and submitted to the Postmaster-General for acceptance	12,936
Number of new bonds reported to the Third Assistant Postmaster-General	954
Number of new bonds reported to the Auditor	12,936
Number of new bonds reported to the Money-Order Office	1,202
Number of new bonds filed	12,936
Number of jackets prepared in sending new bonds	15,871
Number of commissions prepared and mailed to postmasters	21,091
Number of commissioned postmasters reported to the Auditor	21,091
Number of commissioned postmasters reported to the Third Assistant Postmaster-General	21,091
Number of commissioned postmasters reported for publication in the Postal Bulletin	21,091
Number of commissioned postmasters reported to the Money-Order Office ..	4,956
Number of blank designations and oaths mailed to acting postmasters	518
Number of designations and oaths of acting postmasters received, examined, indorsed, recorded, and filed	353
Number of acting postmasters reported to the Auditor	353
Number of circular letters sent on appointments, establishments, changes of names and sites, and discontinuances of post-offices	47,042
Number of circulars sent with new bonds	31,742
Number of circular letters relating to terms of service of postmaster sent ..	1,023
Number of circulars sent to appointees delinquent in the execution of their official bonds	1,308
Number of circular letters accompanying bonds returned for correction	4,057
Number of circulars accompanying commissions sent to postmasters	22,626
Number of surety circulars sent to Chief Post-Office Inspector	6,202
Number of notifications sent to sureties relative to postmasters' failure to pay amount due the United States	165
Number of circulars sent to postmasters delinquent in furnishing new bonds	1,540
Number of circular letters sent notifying sureties of death of postmasters ..	518
Number of manuscript letters written	1,057
Number of post-office inspectors' reports on responsibility of sureties received, examined, and filed	7,606
Number of blank oaths for assistant postmasters, clerks, and employes mailed	65,579
Number of oaths of assistant postmasters, clerks, and employes, received, examined, indorsed, and filed	40,526
Number of establishments, discontinuances, and changes of names and sites of post-offices reported to the Second Assistant Postmaster-General ..	5,129
Number of establishments, discontinuances, and changes of names and sites of post-offices reported to the Third Assistant Postmaster-General	4,329

Number of establishments, discontinuances, and changes of names and sites of post-offices reported to the equipment division	4,329
Number of new offices reported to the division of post-office supplies	2,963
Number of discontinuances reported to the Auditor	905
Number of entries made on the books of the division	156,247
Number of current records in use	36
Number of blank forms in use	75

DIVISION OF CORRESPONDENCE.

The following is a summary of the work performed in this division during the fiscal year ended June 30, 1886:

Number of letters written to postmasters and private individuals involving decisions under postal laws and regulations	16,632
Number of telegrams sent in reply to communications requiring the immediate action of the Department	66
Number of newspaper and periodical publications claiming the right of admission to the mails as second-class matter, examined and admitted or rejected	4,380
Amount of money collected from publishers of second-class matter for violations of law in mailing third-class matter inclosed with their publications at second-class rates	\$2,086 14

The increase in correspondence of this division over the fiscal year ended June 30, 1885, was over 33 per cent. It also shows an increase over the year ended June 30, 1882, of nearly 100 per cent.

The number of newspaper and periodical publications submitted for classification exceeded the number submitted during the year ended June 30, 1885, by about 15 per cent., and 1882, by about 40 per cent.

The collections, amounting to \$2,086.14, were made through the office of the Third Assistant Postmaster-General, and were the result of decisions made in this division.

The duties of the division are well set forth in its title. It is a division of correspondence, to which are referred all letters received at the office from postmasters requesting information concerning the performance of their official duties, and from the public in regard to the classification of mail matter, the delivery of mail the ownership of which is in controversy, the proper construction of the laws and regulations of the Department, &c.

It may be proper to state that the correspondence and items referred to in this report do not fully cover the work of the division. Many questions were personally submitted of which no record could be kept.

DIVISION OF POST-OFFICE SUPPLIES.

This division supplies post-offices of the fourth class with thirty-two different forms of blanks, canceling-ink, stamping-pads, eight-ounce letter-balances, marking and rating stamps, and, if the salary be \$50 or more, with twine and wrapping-paper.

The same supplies are furnished to offices of the third class as are furnished to offices of the fourth class whose salary is \$50 or over; and, in addition thereto, with the same blanks as are furnished first and second class offices, except such as relate to the free delivery service.

Offices of the first and second classes are furnished with twine, wrapping-paper, canceling-ink, letter-balances and scales, rating, canceling and marking stamps, stamping-pads, stationery, and blanks.

The following tabulated statement shows in a concise form the growth of this division during the past five fiscal years:

Supplies.	1881-'82.	1882-'83.	1883-'84.	1884-'85.	1885-'86.
Blanks for Department, postmasters, and railway mail service	48, 176, 450	50, 156, 464	51, 697, 800	51, 469, 447	57, 674, 302
Books for records of Department, postmasters, and railway mail service	82, 703	119, 529	131, 147	87, 107	125, 494
Facing slips	82, 736, 600	48, 960, 000	48, 583, 700	65, 146, 760	120, 644, 600
Marking, rating, and canceling stamps	6, 589	16, 556	13, 071	21, 229	12, 230
Jute twine	443, 102	584, 000	566, 717	500, 000	580, 000
Hemp twine	116, 489	149, 805	158, 298	210, 000	146, 000
Cotton twine .....	.....	71, 018	126, 296	130, 000	109, 000
Letter balances and scales	2, 621	13, 541	4, 447	3, 728	2, 679
Wrapping-paper	13, 621	20, 839	11, 506	17, 313	29, 837
Canceling-ink .....	.....	11, 376	(*)	(*)	11, 100
Inking-pads .....	.....	11, 700	(*)	(*)	5, 475

* No appropriation.

APPROPRIATIONS AND EXPENDITURES FOR TWINE, PAPER, SCALES, STAMPS, ETC.

The appropriations and expenditures for the foregoing articles for the fiscal years 1884-'85 and 1885-'86 were as follows:

	Appropriation, 1884-'85.	Expended, 1884-'85.	Appropriation, 1885-'86.	Balance unexpended, 1885-'86.
Wrapping-paper	\$35, 000 00	\$34, 997 60	\$35, 000 00	\$6, 004 00
Twine	82, 277 30	79, 149 50	85, 000 00	15, 368 00
Letter balances and scales	25, 000 00	17, 803 20	20, 000 00	18, 696 00
Postmarking, rating, and canceling stamps	25, 000 00	10, 233 04	20, 000 00	7, 424 00
Stationery	65, 000 00	46, 914 06	65, 000 00	23, 961 00
Printing, binding, &c.	180, 000 00	169, 212 42	178, 612 50	4, 556 00
	412, 277 30	358, 808 82	403, 612 50	76, 091 00

The sum of the appropriations for the fiscal year ended June 30, 1886, amounted to \$403,612, and the expenditures for the same period were \$327,520, about 82 per cent. of the appropriations. This left at the close of the fiscal year ended June 30, 1886, an aggregate of \$76,091 unexpended. This, however, does not include the stock on hand at the beginning of the fiscal year, amounting (estimated value) to about \$5,000.

STATIONERY.

Of the \$65,000 appropriated for stationery, only \$41,039 (63 per cent.) was expended.

The expenditures for the past seven fiscal years were as follows:

Year.	Amount.
1879-'80	\$48, 284 81
1880-'81	49, 234 45
1881-'82	56, 517 28
1882-'83	55, 400 00
1883-'84	57, 700 00
1884-'85	46, 914 06
1885-'86	41, 039 00
Total	354, 693 60

Average per year, \$50,813.

This favorable showing is the result of the good contracts made by the Department for stationery supplies.

TWINE.

During the fiscal year 1884-'85 840,000 pounds of twine were used, while during the fiscal year ended June 30, 1886, but 836,000 pounds were used—4,000 pounds less than were required during the fiscal year 1884-'85.

This decrease in the number of pounds of twine used, while there was a considerable growth of the service, is accounted for by the fact that during the fiscal year last past the Department insisted on, and got, the number of yards to the pound to which it was entitled under its contracts. It is estimated that by this means 140,000 pounds of twine have been saved to the Department, which would have cost about \$11,600. Owing to this saving and the good contracts made by the Department, only \$69,632 of this appropriation of \$85,000 was expended.

The twine on hand at the close of the fiscal year 1885-'86 exceeded in value that on hand at the close of the preceding fiscal year by \$1,700, which shows that only 80 per cent. of the appropriation was used.

BLANKS AND BLANK BOOKS.

There were furnished during the fiscal year 1885-'86 57,674,302 blanks, as against 51,469,447 for the previous year, an increase of over 6,000,000, equal to 12 per cent.

The number of blank books furnished during the fiscal year 1885-'86 was 125,414, as against 87,107 the year preceding, an increase of over 38,000, equal to 40 per cent.

FACING SLIPS.

The Department has a record of 120,644,680 facing slips furnished during the fiscal year 1885-'86 as against 65,141,760 for the previous fiscal year. This was an increase of over 55,000,000, or 85 per cent.

This does not show the whole number of slips used, nor are the data at hand from which it can be ascertained, as some of the larger offices, notably New York City, print their own slips, no report of which is made to the Department. It is estimated from the amount of paper furnished that the number must be about 200,000,000.

Contracts were made in September, 1885, by which these slips were printed for 7 cents per 1,000 for the remainder of the fiscal year ending June 30, 1886.

Contracts have been made by which these slips will be printed for 4½ cents per 1,000 for the fiscal year ending June 30, 1887.

CANCELING INK.

Under existing law, canceling ink should be furnished to all fourth-class offices. These offices numbered, July 1, 1886, 51,349. This ink is put up, usually, in half-pound cans, and during the past year 3,600 half-pound cans were ordered and supplied from the Department. It will be observed, therefore, that about 47,749 post-offices were not supplied. This, no doubt, is due, largely, to the fact that postmasters have not informed themselves that they are entitled to and should be furnished with canceling ink. A circular letter has been prepared and mailed to all fourth-class postmasters, embodying in a concise form the rules and regulations on this subject.

PRINTING, BINDING, ETC., FOR THE DEPARTMENT.

The following are appropriations and expenditures for the past six fiscal years for printing, binding, &c.:

Years.	Appropriations.	Expenditures.	Balances.
1880-'81.....	\$150,000 00	\$119,169 45	\$30,830 55
1881-'82.....	150,000 00	133,504 72	16,495 28
1882-'83.....	150,000 00	140,998 36	9,001 64
1883-'84.....	180,000 00	179,996 09	10,003 91
1884-'85.....	180,000 00	169,214 42	10,785 58
1885-'86.....	178,612 50	174,055 90	4,556 60
	988,612 50	925,936 94	62,675 56

Balance unexpended, \$62,675.56.

The average yearly appropriations have been \$164,768.75, and of expenditures thereunder, \$155,082.27.

SALARY AND ALLOWANCE DIVISION.

As stated in my last report, the most important duties of this division are the adjustment of the salaries of Presidential postmasters, or postmasters of the first, second, and third classes; the consideration of applications for allowances for clerk-hire, rent, fuel, light, furniture, miscellaneous and incidental expenditures; the examination of the quarterly returns or accounts of postmasters at offices of the first and second classes before they are finally passed by the Auditor of the Treasury for the Post-Office Department; the regulation of the salaries and duties of the employés necessary for the proper transaction of the postal business in the larger post-offices; the superintendence and regulation of box-rent rates and deposits for keys for lock-boxes; and a supervision of the large and increasing correspondence relative to the subject matters stated.

In addition to the regular and routine duties of the division, the work of reviewing and readjusting the salaries of postmasters at offices of the third, fourth, and fifth classes under the act of Congress approved March 3, 1883, was assigned to it by verbal order of Postmaster-General Gresham, April 7, 1884. This large and important work has been continued under the personal supervision of the chief, and has been carried on as rapidly as possible with the limited additional force of detailed clerks at command.

The duties of the division have been largely increased, also, by the act of Congress approved March 3, 1883, which requires an *annual* adjustment of the salaries of Presidential postmasters, to take effect at the beginning of each fiscal year (July 1) instead of a *biennial* adjustment as heretofore authorized. The *third annual* adjustment of the salaries of Presidential postmasters was made upon the basis of the gross receipts accruing at the respective offices for the four (4) quarters ended March 31, 1886. The work of this division has also been increased by the act approved June 29, 1886, to take effect July 1, 1886, which provides that clerks doing money-order business at offices of the first and second classes shall be compensated from the allowance for clerk-hire as made by this office, and that the commissions accruing on money-order business from the date named shall be returned as a part of the revenue of the Department.

The number of letters received during the fiscal year ended June 30, 1886, amounted to 24,031; an increase of 2,158, or 09.8 per cent., as compared with 1885, and 6,194, or 34.7 per cent., more than the number received for the year 1884.

The number of letters written amounted to 30,105; an increase of 1,773, or 06.2 per cent., over 1885.

Fifteen thousand and eighty-six circular letters were sent out; a decrease of 9,858, or 39.5 per cent., as compared with 1885.

Three thousand four hundred and twelve allowances for clerk-hire were made; an increase of 60, or 01.7 per cent., as compared with 1885.

The number of applications for clerk-hire declined was 1,727; an increase of 39, or 02.3 per cent., as compared with the year 1885.

One thousand three hundred and fifty-three allowances for rent, fuel, and light were made, being a decrease of 337, or 19.9 per cent., as compared with 1885.

Six hundred and eighty-eight applications for allowances for rent, fuel, and light were declined, an increase of 161, or 31.7 per cent. over 1885.

The total number of allowances for miscellaneous items made numbered 4,983, and 2,130 applications for miscellaneous items were declined.

Five hundred and twenty-three allowances for furniture for post-offices were made, and 720 applications for furniture were declined.

There were 28 applications for stationery declined. (See page 34 of this report relative to these accounts.)

There were 240 allowances for advertising made, the aggregate amount being \$10,376.18, and 214 applications for advertising were declined.

Fifty-seven post-offices of the fourth class were reported by the Auditor where the annual compensation of the postmaster amounted to \$1,000 for four consecutive quarters, exclusive of money-order commissions. All of the said offices (57) were assigned to the third class, the aggregate salaries of the postmasters thereat making a total of \$61,000, an increase of 13 offices and \$14,000 for compensation of postmasters as compared with 1885.

The special adjustments of postmasters' salaries numbered 62, involving the aggregate amount of \$62,675 for salaries. There were 46 salaries of postmasters reduced and discontinued, making a saving of \$47,200.

The total number of salaries of Presidential postmasters adjusted during the year was 2,328, and the aggregate amount involved for salaries in all the adjustments was \$3,796,375.

The allowances for clerk-hire reduced or discontinued during the year numbered 122, making a saving of \$32,864.

One hundred and seven allowances for rent, fuel, and light were reduced or discontinued, making a saving of \$40,263.

Since the work of reviewing and readjusting the salaries of postmasters of the third, fourth, and fifth classes, under the act of Congress approved March 3, 1883, was assigned to this division, April 7, 1884, 49,851 applications for review of salaries under the said act have been received and placed on the files of the Department.

The number of applications reviewed and readjusted to date number 28,418; of this number, 10,763 have been allowed, involving the aggregate additional amount for compensation or back-pay of postmasters of \$615,479.96.

There were 17,655 applications reviewed and found to be below the 10 per cent. requirement of law.

ADJUSTMENT OF PRESIDENTIAL POSTMASTERS' SALARIES.

Under the act of Congress approved March 3, 1883, making provision for *annual* instead of *biennial* adjustments, as heretofore, the *third annual* adjustment of the salaries of Presidential postmasters or postmasters at offices of the first, second, and third classes, was made upon the basis of the gross receipts which accrued at the respective offices for the four quarters ending March 31, 1886, to take effect July 1, 1886. This adjustment was made upon the gross receipts for one year or four quarters upon the new or reduced rate of postage. The salaries of postmasters at 2,265 post-offices were reviewed. As a result of the adjustment 75 offices were assigned to the first class, 400 to the second class, and 1,769 to the third class, from July 1, 1886. This was an increase of 4 first-class offices, 17 second-class offices, and 4 third-class offices from the date named. There were 24 new offices (all third class), added to the Presidential list from July 1, 1886, and 45 offices (all third class) were relegated to the fourth class from the same date, making the total number of Presidential offices July 1, 1886, 2,244. The aggregate amount required to pay salaries of Presidential postmasters was \$3,685,500, and the grand total of gross receipts which accrued at the same offices for the four quarters ending March 31, 1886, amounted to \$32,491,551.58. As compared with the receipts as shown by the adjustment of 1885, this is an increase of \$699,331.03.

The aggregate salaries of the postmasters will absorb 11.34 per cent. of the revenue of the Presidential offices, being .08 per cent. less than the percentage shown by the adjustment which took effect July 1, 1885.

The grand total of gross receipts which accrued at these offices for the four quarters ended March 31, 1886, is 74.07 per cent. of the revenue of the Department for the same period.

The several adjustments of the salaries of Presidential postmasters made in accordance with the requirements of the act of March 3, 1883, to take effect October 1, 1883, July 1, 1884, July 1, 1885, and July 1, 1886, are herewith tabulated, viz:

Comparative statement of the adjustments of salaries of Presidential postmasters which took effect October 1, 1883, July 1, 1884, July 1, 1885, and July 1, 1886, in compliance with the requirements of the act of March 3, 1883.

Date.	Number of Presidential offices.	Aggregate salaries of Presidential postmasters.	Average salary of Presidential postmasters.	Aggregate receipts which accrued at Presidential offices.	Per cent. of aggregate receipts absorbed for postmasters' salaries.	Per cent. of entire revenue of Department which absorbed at Presidential offices.
October 1, 1883	2,195	3,707,500	1,689	33,535,263 95	11.06	74.3
July 1, 1884	2,323	3,828,700	1,648	33,031,697 33	11.59	74.2
July 1, 1885	2,233	3,630,600	1,625	31,792,220 55	11.42	75.2
July 1, 1886	2,244	3,685,500	1,642	32,491,551 58	11.34	74.07

I also submit a tabulated statement, arranged by States and Territories in alphabetical order, showing the number of Presidential post-offices, the aggregate salaries of postmasters, and the aggregate receipts for the four quarters ended March 31, 1886, as follows:

Statement showing the number of Presidential post-offices in the several States and Territories, and the aggregate salaries of the postmasters thereof, as adjusted to take effect July 1, 1886.

	Number of Presidential post-offices, adjusted to July 1, 1886.	Aggregate salaries of postmasters.	Aggregate receipts, four quarters ended March 31, 1886.
Alabama	18	\$29,500	\$148,810 58
Alaska			
Arizona	4	6,900	23,430 03
Arkansas	10	25,100	104,033 81
California	63	101,500	920,864 41
Colorado	29	4,800	279,280 12
Connecticut	54	94,400	642,625 28
Dakota	48	63,200	194,806 09
Delaware	6	9,900	68,235 38
District of Columbia	1	5,000	802,884 77
Florida	15	27,100	123,815 21
Georgia	29	48,500	823,034 08
Idaho	6	7,700	18,192 08
Illinois	176	276,100	2,078,116 39
Indiana	84	136,900	709,466 94
Indian Territory			
Iowa	120	191,700	885,862 68
Kansas	98	156,700	617,594 06
Kentucky	88	61,900	437,544 82
Louisiana	12	18,300	808,798 84
Maine	35	57,100	321,204 28
Maryland	19	31,100	585,693 30
Massachusetts	121	211,800	2,638,088 90
Michigan	102	167,400	998,267 09
Minnesota	47	75,700	645,116 59
Mississippi	23	32,900	108,314 19
Missouri	74	116,700	1,438,302 46
Montana	12	12,000	76,054 29
Nebraska	61	89,400	394,925 20
Nevada	7	10,000	28,634 38
New Hampshire	28	46,900	193,061 03
New Jersey	64	113,400	702,110 81
New Mexico	7	11,900	40,060 69
New York	216	870,300	7,135,383 42
North Carolina	22	35,800	133,040 18
Ohio	133	231,100	2,063,467 37
Oregon	13	20,600	115,925 13
Pennsylvania	169	268,700	2,064,266 38
Rhode Island	11	22,400	278,829 04
South Carolina	16	24,700	128,633 78
Tennessee	25	40,500	318,901 09
Texas	71	112,300	497,037 47
Utah	4	7,700	49,875 09
Vermont	23	40,600	154,668 93
Virginia	30	52,200	335,629 50
Washington	13	19,600	62,263 79
West Virginia	14	22,000	96,143 69
Wisconsin	76	121,200	687,048 28
Wyoming	5	8,100	31,502 31
Total	2,244	3,685,500	32,491,551 58

Grand total gross receipts \$32,491,551 58

Grand total postmasters' salaries 3,685,500 00

Percentage of gross receipts absorbed by salaries 11.34

The grand total of gross receipts of Presidential offices for the four quarters ended March 31, 1886, amounts to 74.07 per cent. of the revenue of the Post-Office Department for the same period.

REVIEW OF SALARIES OF POSTMASTERS OF THE THIRD, FOURTH, AND FIFTH CLASSES, UNDER THE ACT OF MARCH 3, 1883.

In my report of last year (see pages 217, 218, and 219, Report of the Postmaster-General for the fiscal year ended June 30, 1885) relative to the review of the salaries of postmasters and ex-postmasters of the third, fourth, and fifth classes, as required by the act of Congress approved March 3, 1883, as construed by the Attorney-General of the United States under date of February 13, 1884, and reaffirmed June 14, 1884, a complete and concise history of the work of reviewing the said salaries was given from the time the subject-matter was assigned to the Salary and Allowance division of this Bureau by Postmaster-General Gresham, April 7, 1884, to and including the completion of the first schedule of claims for the State of Ohio.

Since that report was made the work has progressed as rapidly as possible with the limited clerical force assigned to said division, and the first schedules of claims for the following States and Territories have been completed, viz: Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington Territory, West Virginia, Wisconsin, Wyoming, and Idaho; and the second schedules of claims for the States of Alabama and Arkansas have also been completed.

The second schedules for the other States and Territories will be taken up in alphabetical order and completed as soon as possible.

At the present time the claims included in the second schedules for the States of California, Colorado, and Connecticut are in process of review.

Twenty-eight thousand four hundred and eighteen claims have been reviewed, and 10,763 have been allowed; 17,655 were found to be below the 10 per cent. requirement of the law, or for periods outside of the dates defined by the act.

The total amount allowed as additional compensation to date is \$615,479.96. This sum exceeds the amount appropriated by Congress to date by \$11,575.47, the aggregate amount appropriated by Congress being \$603,904.49, as follows:

Under act approved July 7, 1884	\$45,213 80
Under act approved March 3, 1885.....	178,481 23
Under act approved August 4, 1886	380,209 46
Total.....	603,904 49

The appropriation approved August 4, 1886, was made by Congress in the "Act making appropriations to supply deficiencies in the appropriations for the fiscal year ending June 30, 1886, and for prior years, and for other purposes," and as persistent efforts were made to cast doubt upon the construction of the act of March 3, 1883, as affirmed by the Attorney-General of the United States, as hereinbefore stated, Congress enacted the following additional legislation confirming the adjustments of the salaries of postmasters and ex-postmasters of the third, fourth, and fifth classes as made by the Department, and also limited the time for the presentation of claims of this character to January 1, 1887. The text of section 8, as approved by Congress August 4, 1886, is as follows, viz:

Compensation of postmasters readjusted under act of March 3, 1883.

For compensation of postmasters readjusted because of the act of March third, eighteen hundred and eighty-three, and to pay the several amounts reported by the Auditor of the Treasury for the Post-Office Department as due and unpaid, payable

from deficiency in the postal revenue for eighteen hundred and eighty-three and prior years, three hundred and eighty thousand two hundred and nine dollars and forty-six cents: *Provided*, That the method of reviewing and readjusting the salaries of postmasters and late postmasters of the third, fourth, and fifth classes, under the classification of the act of July first, eighteen hundred and sixty-four, during the period between July first, eighteen hundred and sixty-four, and July first, eighteen hundred and seventy-four, which has been practiced in the Post-Office Department under and since the act of March third, eighteen hundred and eighty-three, entitled "An act authorizing and directing the Postmaster-General to readjust the salaries of certain postmasters in accordance with the provision of section eight of the act of June twelfth, eighteen hundred and sixty-six," by which all such reviews and readjustments have been made prospectively for the biennial periods provided for in the said act of July first, eighteen hundred and sixty-four, upon the basis of the quarterly returns of postmasters during the preceding biennial periods, respectively, whenever the salary actually paid was ten per centum less in amount than such salary should have been if adjusted correctly upon such returns by computing what the commissions upon the same would have been under the act of June twenty-second, eighteen hundred and fifty-four, and averaging the amount thereof annually, as directed by the act of July first, eighteen hundred and sixty-four, for fixing salaries, is approved and ratified as a correct administration of the aforesaid act of March third, eighteen hundred and eighty-three, and of all other acts applicable thereto; and that the several readjustments which have been made are ratified as a correct disposition of the several claims which have been considered and disposed of, and for which this appropriation is made; and the several persons to whom amounts have been respectively found due are declared the rightful persons entitled to the same, and such amounts to be the full sums due upon any and all such claims; and that all claims in excess thereof, and all other claims for readjustment which have been examined and found by the proper officers of the Post-Office Department not entitled to readjustment within such rule of administration, are disallowed and barred. That no claim for review or readjustment of any such salary shall be hereafter considered unless the same shall be presented to the Post-Office Department before the first day of January, eighteen hundred and eighty-seven; and that in considering all claims not yet readjusted the same method shall be pursued which is hereby approved; and any and every different method of readjustment of salaries of such postmasters and late postmasters during the period between July first, eighteen hundred and sixty-four, and July first, eighteen hundred and seventy-four, than is herein approved, is hereby prohibited; and no action or suit shall be maintainable in any court against any officer of the United States by reason of his action in reviewing or refusing to review, or allowing or disallowing, any application for readjustment of any such salary: *And provided further*, That payment of all sums hereby appropriated shall be made by warrants or checks, as provided by the said act of March third, eighteen hundred and eighty-three, payable to the order of and transmitted to the persons entitled respectively thereto.

A tabulated statement, showing the progress of the work of reviewing the said salaries from April 7, 1884, to date, is herewith submitted, viz:

Statement showing progress of the work of reviewing the adjustment of the salaries of postmasters at offices of the third, fourth, and fifth classes, in compliance with the requirements of the act of March 3, 1883.

Date of schedule.	States.	Number of schedules.	Total number of cases reviewed.	Number of cases allowed to date.	Aggregate amount heretofore allowed postmasters.	Aggregate amount allowed under act of March 3, 1883.
1884.						
May 14	Alabama.....	1	88	38	\$10,880 00	\$3,382 14
June 9	Indiana.....	1	565	223	64,035 70	16,892 13
11	Iowa.....	1	713	175	58,905 42	14,868 54
16	Connecticut.....	1	261	89	21,528 79	5,157 48
24	Arizona.....	1	2	1	495 00	169 54
24	Dakota.....	1	22	1	402 50	51 86
24	Florida.....	1	57	10	8,709 04	2,824 06
26	Colorado.....	1	56	6	660 80	217 32
July 2	Kansas.....	1	178	69	12,251 53	2,485 33
2	Arkansas.....	1	26	13	3,865 11	1,366 02
5	Georgia.....	1	76	24	7,853 53	2,030 46
Aug. 30	California.....	1	156	81	12,949 29	2,422 31
30	Delaware.....	1	53	6	730 00	622 64
30	Illinois.....	1	1,722	546	164,677 33	26,747 72
30	Kentucky.....	1	216	70	19,482 30	5,806 25
30	Louisiana.....	1	75	15	7,001 56	1,947 06
30	Maine.....	1	497	148	30,190 73	7,637 24
30	Maryland.....	1	213	61	21,135 93	12,401 77
Sept. 8	Massachusetts.....	1	466	111	62,521 77	12,389 56
26	Michigan.....	1	753	224	66,180 42	16,947 09
Oct. 1	Minnesota.....	1	499	129	20,515 13	5,266 72
8	Mississippi.....	1	100	26	10,778 96	2,846 61
Nov. 12	Missouri.....	1	607	195	44,686 07	12,804 72
12	Nevada.....	1	17	7	3,868 66	943 14
18	New Mexico.....	1	17	4	444 19	133 43
18	Oregon.....	1	42	12	4,033 64	1,138 53
15	Nebraska.....	1	173	21	4,747 80	2,125 48
29	New Hampshire.....	1	375	107	22,879 67	5,406 12
Dec. 2	Montana.....	1	15	2	358 00	174 83
15	New Jersey.....	1	542	128	29,225 30	6,289 94
1885.						
Mar. 26	New York.....	1	2,244	1,197	306,894 56	77,039 54
23	North Carolina.....	1	234	110	22,603 96	4,967 40
July 18	Ohio.....	1	4,283	2,099	366,177 71	104,522 03
Nov. 18	Pennsylvania.....	1	6,129	2,514	393,414 52	111,416 51
Dec. 18	Rhode Island.....	1	111	30	12,623 84	3,060 46
23	South Carolina.....	1	182	37	13,918 90	5,956 29
31	Tennessee.....	1	602	149	42,104 44	10,065 42
1886.						
Jan. 8	Texas.....	1	373	107	29,214 61	10,764 79
9	Utah.....	1	147	29	1,208 60	502 64
23	Vermont.....	1	742	229	55,183 34	12,164 66
Mar. 6	Virginia.....	1	1,030	381	40,069 80	14,241 21
19	Washington.....	1	28	11	2,407 75	728 74
Apr. 27	West Virginia.....	1	736	326	45,562 79	20,067 64
May 29	Wisconsin.....	1	2,248	694	144,872 17	39,316 22
June 8	Wyoming.....	1	14	2	700 50	261 73
8	Idaho.....	1	13	2	401 50	21 42
Aug. 11	Alabama.....	2	292	121	22,111 66	7,133 25
17	Arkansas.....	2	240	63	10,826 91	4,371 56
	Total.....	48	28,418	10,703	2,218,264 41	615,479 86

BOXES AND BOX-RENTS.

Post-office boxes serve a threefold purpose, to wit: First, as an accommodation to patrons of the office; second, as a convenience to postmasters, and, third, as a source of revenue. They are classed as call-boxes, lock-boxes, and lock-drawers; and are provided, as a rule, by post-

masters, except at post-offices located in Government buildings, which are furnished with box outfits by the Treasury Department, and at such post-offices of the first and second classes, located in buildings leased for a term of not exceeding five years, where an outfit of boxes is included under the provisions of the lease.

The revenue derived from the rent of boxes at Presidential post-offices is included in the gross receipts accruing at the said offices, in making the annual adjustment of Presidential postmasters' salaries. The said postmasters, therefore, receive, indirectly, a part of the box-rents in the sum allowed as compensation. At fourth-class offices all the box-rents practically go to the postmasters, the Government deriving no revenue therefrom.

The supervision of box-rent rates by the Department during the past fiscal year has continued the improvement of this branch of the service. From the statements furnished by postmasters at the request of this office, relative to the number of boxes in their offices, number in use, and rental price for each class of boxes, extreme rental prices have been adjusted to conform to the local requirements of the respective offices, due regard being given, at the same time, to the benefits afforded box-renters, thus securing greater uniformity of prices.

This fact, and the careful supervision given to this subject, has, I am pleased to state, reduced the number of complaints relative to box-rent rates to the minimum.

KEY DEPOSITS.

During the year a large number of letters relative to key-deposits were received and mailed, also a large number of circular-letters of instructions and blank forms for use of postmasters in making their reports.

The modified regulations requiring postmasters to make reports relative to key deposits semi-annually, instead of quarterly as heretofore, and also allowing postmasters who provide their own boxes to exercise their discretion in collecting a deposit for keys, has simplified the work to some extent; but, notwithstanding these changes, the reports accumulated faster than the limited force assigned to the work could dispose of it.

LEGISLATION RECOMMENDED.

ALLOWANCES FOR RENT FOR THIRD-CLASS OFFICES.

I renew the recommendation heretofore made by this office, that the Government pay the office rent at post-offices of the third class. As stated concisely by the Postmaster-General (see Report of the Postmaster-General for the fiscal year ended June 30, 1884, page 20), "there is no reason why these expenses should not be paid at third-class post-offices as well as at first and second class offices."

I beg to state that this matter was fully considered in my report of last year (see report of the Postmaster-General for the fiscal year ended June 30, 1885, page 225), and therefore it is unnecessary to add anything further at this time than the fact that in the appropriation act for the service of the Post-Office Department for the current fiscal year the discretionary authority given to the Postmaster-General to lease premises for the use of post-offices of the third class, which was incorporated in the appropriation act for the postal service for the fiscal year ended June 30, 1886, has been omitted.

I submit herewith a tabulated statement showing the number of these offices of each grade, by States and Territories, in effect July 1, 1886:

Statement showing the number of third-class post-offices July 1, 1886, arranged to exhibit the number in each grade from \$1,000 to \$1,900, in each State, Territory, and District.

States and Terri- tories.	Postmasters' salaries.										Total.
	\$1, 000.	\$1, 100.	\$1, 200.	\$1, 300.	\$1, 400.	\$1, 500.	\$1, 600.	\$1, 700.	\$1, 800.	\$1, 900.	
Alabama.....	1	3	2	.....	4	1	.....	3	.....	.....	14
Alaska.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arizona.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	3
Arkansas.....	3	1	.....	4	.....	1	1	1	.....	2	13
California.....	6	4	6	6	6	7	5	6	3	.....	49
Colorado.....	1	5	.....	.....	4	3	6	2	1	1	23
Connecticut.....	3	8	1	1	8	5	6	2	3	.....	37
Dakota.....	3	6	3	7	9	3	1	2	2	.....	36
Delaware.....	.....	.....	2	1	1	.....	.....	1	.....	.....	5
District of Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Florida.....	.....	.....	.....	1	1	2	1	3	2	1	11
Georgia.....	2	3	4	2	3	2	3	2	.....	1	22
Idaho.....	1	1	1	1	1	.....	.....	1	.....	.....	6
Illinois.....	16	18	22	17	21	15	15	9	7	5	145
Indiana.....	4	8	8	5	11	11	6	6	5	3	67
Indian Territory.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa.....	10	6	13	7	17	19	11	9	4	5	101
Kansas.....	9	10	6	5	11	12	8	12	8	2	83
Kentucky.....	1	7	3	4	2	3	4	3	2	1	30
Louisiana.....	3	1	2	1	1	1	.....	.....	1	.....	10
Maine.....	4	4	3	1	5	2	3	3	1	.....	26
Maryland.....	2	.....	4	3	3	1	.....	1	.....	.....	14
Massachusetts.....	5	8	7	11	11	15	12	10	7	6	92
Michigan.....	5	14	7	4	14	9	10	10	5	.....	78
Minnesota.....	2	9	5	3	5	3	3	6	1	1	38
Mississippi.....	4	4	3	.....	4	2	1	.....	1	.....	19
Missouri.....	5	14	10	5	3	7	7	7	6	1	65
Montana.....	1	.....	1	1	4	1	1	1	.....	.....	10
Nebraska.....	6	9	6	10	4	10	4	3	1	.....	53
Nevada.....	1	2	.....	.....	.....	1	.....	1	2	.....	7
New Hampshire.....	1	3	3	2	3	3	3	3	1	.....	22
New Jersey.....	2	5	3	2	6	6	9	6	6	3	48
New Mexico.....	.....	.....	.....	1	1	.....	2	.....	1	.....	5
New York.....	12	18	22	18	15	27	15	17	9	10	163
North Carolina.....	1	2	1	2	4	2	1	1	2	2	18
Ohio.....	11	10	12	6	9	15	7	7	9	9	95
Oregon.....	2	1	.....	.....	3	3	1	.....	1	.....	11
Pennsylvania.....	14	16	9	18	11	17	12	17	11	1	120
Rhode Island.....	.....	.....	.....	2	.....	.....	3	.....	1	.....	6
South Carolina.....	2	1	3	1	3	1	1	1	.....	.....	13
Tennessee.....	1	4	6	1	3	2	1	.....	2	.....	20
Texas.....	4	6	11	8	11	11	1	8	3	2	60
Utah.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	2
Vermont.....	.....	2	3	1	6	4	1	1	.....	1	19
Virginia.....	2	1	2	1	7	3	2	1	1	3	23
Washington.....	1	3	1	1	1	2	.....	.....	1	.....	10
West Virginia.....	1	2	3	.....	1	1	2	1	.....	.....	11
Wisconsin.....	4	10	6	6	10	8	6	6	4	2	62
Wyoming.....	.....	1	.....	.....	2	.....	.....	.....	1	.....	4
Total.....	156	231	204	159	249	242	177	173	116	62	1,760

RENT FOR POST-OFFICE, WASHINGTON, D. C.

I beg to call attention to the fact that rent for the premises used for the post-office of Washington, D. C., has not been provided for by Congress for the current fiscal year.

In the "Act making appropriations for the service of the Post-Office Department for the fiscal year ending June 30, 1887," provision is made for the rent of a suitable building for the "Capitol Hill" branch of the Washington office, but payment of the rent of the main office has not been provided for; and, therefore, from July 1, last, no rent for the said

office will be paid until authority for the same has been granted by Congress.

I also respectfully call attention to the fact that no action was taken by Congress during the past session relative to rent for the branch of the Washington post-office known as "Station C," which is now located on F street northwest, between Fourteenth and Fifteenth streets. This is an important branch of the Washington office, and provision for paying rent for suitable premises to accommodate the postal business of the station should be made without delay. (See Report of the Postmaster-General for the fiscal year ended June 30, 1885, page 227.)

STATIONERY.

In conclusion, I beg to state that the recommendation of this office (see Report of the Postmaster-General for the fiscal year ended June 30, 1885, page 227) relative to certain claims for amounts expended by postmasters for stationery for the fiscal year ended June 30, 1883, was favorably considered by Congress and provision made for the payment of the same in the "deficiency act" approved August 4, 1886. The amounts, as stated in the list transmitted to Congress by the Postmaster-General, under date of May 21, 1886, aggregating \$1,476.31, have been credited in the accounts of the postmasters named in the said list and the said accounts closed.

MONEY-ORDER CLERK-HIRE.

I also beg to state that the recommendation of this office (See Report of the Postmaster-General for the fiscal year ended June 30, 1885, page 226) relative to money-order clerk-hire was favorably considered by Congress; but in the act approved June 29, 1886, to take effect July 1, 1886, provision was not made for the payment of money-order clerk-hire. This, in my judgment, should receive the favorable consideration of Congress.

THE FREE-DELIVERY SYSTEM.

There were 181 free-delivery offices at the close of the fiscal year ended June 30, 1886, an increase of three over the preceding year, the new offices being Aurora, Ill.; Duluth, Minn.; and Newport, Ky. The number of carriers was 4,841, an increase of 483.

The appropriation for the service was \$4,485,000, of which \$45,000 was provided for the establishment of the system at post-offices entitled thereto.

The total cost of the service was \$4,312,306.70, leaving a balance unexpended of \$172,693.30. The surplus was caused by the retirement from the service of a large number of carriers receiving the maximum rate of pay, and the appointment of others to fill the vacancies at the minimum rate, as required by act of Congress of August 2, 1882, and the fact that the service was established in but three of the offices entitled thereto, which could not be foreseen at the time the estimates were made.

The following table will show the aggregate results of the free-delivery service for the fiscal year, and a comparison with the results of the preceding year:

Aggregate result of the free-delivery service for the fiscal year ended June 30, 1886.

Statistics of free delivery.	1885.	1886.	Increase.	Per cent.
Number of offices	178	181	3	1.68
Number of carriers	4,858	4,841	17	11.46
Mail letters delivered	464,900,842	510,310,305	45,409,463	9.74
Mail postal cards delivered	104,742,598	109,829,038	5,086,440	4.85
Local letters delivered	143,406,578	171,416,284	28,009,706	19.53
Local postal cards delivered	78,220,576	81,263,920	3,043,344	3.88
Registered letters delivered	3,187,945	3,407,140	219,195	6.87
Newspapers, &c., delivered	256,034,602	300,138,850	44,094,248	17.23
Letters collected	469,858,875	531,206,536	61,347,661	13.05
Postal cards collected	140,636,704	150,077,294	9,440,590	6.71
Newspapers, &c., collected	28,432,673	31,871,132	3,438,459	12.11
Whole number of pieces handled	1,744,537,413	1,949,520,590	204,983,176	11.75
Pieces handled per carrier	400,807	402,710	2,403	.60
Total cost of service including post-office inspectors	\$3,985,052 55	\$4,312,306 70	\$326,254 15	8.19
Average cost per piece in mills	2.3	2.2	.1	-----
Average cost per carrier	\$912 90	\$889 15	+\$23 75	2.4
Amount of postage on local matter	\$5,280,723 10	\$5,839,242 97	\$558,519 87	10.57
Excess of postage on local matter over total cost of service	\$1,294,770 55	\$1,526,986 27	\$232,165 72	17.93

*Based on the aggregate \$4,303,478.99 paid carriers and for incidental expenses, and not including \$8,836.71 paid post-office inspectors.

†Decrease.

Of the 181 offices the receipts from local postage exceeded the cost of service in 19, while 23 others realized over four-fifths, 22 over three-fifths, 29 more than one-half, 35 more than two-fifths, 51 more than one-fifth, and 2 less than one-fifth of the cost.

The following table will show the cost of service and the local postage at each of the 19 offices above referred to:

Post-offices at which the local postage exceeded the cost of the service.

Name of office.	Receipts from local postage.	Cost of carrier service.	Net gain.
Boston, Mass.	\$485,258 64	\$292,877 46	\$192,381 18
Brooklyn, N. Y.	264,892 03	177,137 48	87,754 55
Buffalo, N. Y.	69,552 67	63,879 16	5,673 51
Chicago, Ill.	503,783 44	327,549 37	176,234 07
Cincinnati, Ohio.	155,437 74	120,003 96	35,433 78
Cleveland, Ohio.	59,165 85	58,260 42	905 43
Denver, Colo.	28,277 91	18,608 40	9,669 51
Detroit, Mich.	50,991 05	50,661 67	329 38
Elizabeth, N. J.	8,407 18	7,204 13	1,203 05
Lincoln, Nebr.	7,001 85	5,317 38	1,684 47
Milwaukee, Wis.	47,806 62	46,463 69	1,342 93
New Haven, Conn.	32,893 69	18,651 06	14,242 63
New York, N. Y.	1,905,735 61	642,396 09	1,263,339 52
Omaha, Nebr.	17,108 02	15,620 79	1,487 23
Philadelphia, Pa.	783,707 27	447,431 69	336,275 58
Pittsburg, Pa.	69,493 70	51,819 29	17,674 41
Saint Louis, Mo.	219,706 65	164,769 58	54,936 12
San Francisco, Cal.	124,339 92	69,699 47	54,640 45
Savannah, Ga.	8,283 49	7,770 62	512 87
Total	4,821,902 29	2,596,111 14	2,225,791 15

Additional information concerning the operations of this service, and showing its growth from its inauguration, July 1, 1863, will be found in the tabulated statements marked C and D appended to this report.

In concluding, I desire earnestly to commend the chiefs of division and the clerks of this Bureau for faithful and efficient service.

Very respectfully,

A. E. STEVENSON,
First Assistant Postmaster-General.

Hon. WM. F. VILAS,
Postmaster-General.

REPORT OF THE SECOND ASSISTANT POSTMASTER-GENERAL.

POST-OFFICE DEPARTMENT,
OFFICE OF SECOND ASSISTANT POSTMASTER-GENERAL,
Washington, D. C., October 19, 1886.

SIR: At the close of the last fiscal year, ended June 30, 1886, there were in operation throughout the United States 22,799 routes of all classes on which mail service was maintained by the Department at an annual rate of expenditure on that day of \$29,026,658. This is a very large sum, but when it is considered that these routes aggregate in the star, steamboat, mail-messenger, special and railway service 387,586 miles in length, on which there was an annual travel of 258,788,065 miles, more than 10,000 times the circuit of the globe, penetrating to the remotest sections of the country, and on which the mails were carried to every city, town, and hamlet, to every home and mining camp, and by every means of conveyance from a railroad train speeding at the rate of forty miles an hour to the Indian carrier on his snow shoes picking his cautious way among the avalanches of the Sierras, and with an average frequency of 6.42 trips per week, the magnitude of this sum will not appear out of proportion to the magnitude of the service.

But more than this. While these figures give an adequate conception of the range and extent of the service, to those unfamiliar with the operations of that service the word "mail" conveys but an imperfect idea of the weight and volume of the matter carried. This weight and volume are to be equally regarded with the distance in judging of the relation of the cost to the service. There are no means available at present of ascertaining the weight of the mail matter carried on steamboats and on the star routes, as contracts are made in these two branches of the service without regard to weight or volume of mail; but on the 30th of last June the records in this office show that on that day there were carried on all the railroads in the United States 3,246,431 pounds, or 1,623 tons, of mail matter. It is true that a very large part of this weight passes over more than one route, and is therefore counted more than once; but under the act of 1873 weight constitutes the gauge of payment of railroad transportation, and these figures, therefore, enable us to form an estimate sufficiently approximate of the enormous amount of matter daily transported over all the mail routes in the United States.

I do not mean to be understood as saying that we have reached the point in the relation of expenditure to service, beyond which in the reduction of the former a wise economy cannot safely go. On the contrary, as will hereafter be shown, the cost in one branch of the service—that of railroad transportation—has attained such proportions as to invite, if not to demand, a revision of the law on which it is based.

The distribution of this vast service among the several States and Territories is stated in detail in Table B, herewith appended. The following statement furnishes a succinct view of the inland mail transportation on June 30, 1886, and the annual rate of expenditure therefor.

The annual rate of expenditure for inland mail transportation on the 30th of June, 1886, was—

For 13,245 star routes, aggregating 233,915 miles in length	\$5,352,181
For mail-messenger routes, supplying 5,355 offices	834,860
For 117 steamboat routes, aggregating 10,812 miles in length	446,419
For 1,702 railroad routes, aggregating 123,933 miles in length	15,520,191
For railway post-office car service	1,816,321
For railway post-office clerks	4,518,255

For mail equipments.....	\$233,134
For necessary and special facilities on trunk lines.....	251,726
Total.....	29,026,658

Comparison of the above figures with those of the report for June 30, 1885, shows for star service an increase of 874 routes, of 1,693 miles in length, and a decrease of \$62,623 in annual rate of cost.

For mail-messenger service, an increase of 20 routes, and a decrease of \$44,357 in annual rate of cost.

For steamboat service, an increase of 1 route, and a decrease of 1,185 miles in length, and of \$116,583 in annual rate of cost.

For railroad service, an increase of 81 routes of 2,901 miles in length, and of \$761,696 in annual rate of cost for transportation. The sums actually disbursed appear in the Auditor's report.

The number of contracts drawn in duplicate during the year ended June 30, 1886, was 4,479.

Comparison of the star and steamboat service for the year ended June 30, 1886, with an annual average of said service for seven years next preceding, develops the following results:

	Star service.			Steamboat service.		
	Miles traveled.	Annual cost.	Rate per mile.	Miles traveled.	Annual cost.	Rate per mile.
Average for 1879, 1880, 1881, 1882, 1883, 1884, and 1885 ...	77,705,236	\$5,925,537	Cents. 7.67	4,467,687	\$576,570	Cents 12.15
For year ended June 30, 1886.	83,227,721	5,352,181	6.43	3,117,595	446,419	14.33
Increase (per cent.).....	7.11	.....	.....	.....	.....	.....
Decrease (per cent.).....	.....	9.68	16.17	30.22	84.02	5.48

PERCENTAGE OF INCREASE AND DECREASE IN ESTIMATES FOR IN-
LAND TRANSPORTATION.

Statement showing the percentage of increase or decrease in the estimates of cost for inland mail service for the years 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, as compared with the appropriation for the year preceding each of the above.

Appropriation.		Estimate.		Percentage of increase or decrease.	
Year.	Amount.	Year.	Amount.	Increase.	Decrease.
1880.....	\$20,845,000	1881.....	\$24,125,000 00	15.73	.....
1881.....	23,326,000	1882.....	25,715,032 00	10.24	.....
1882.....	24,376,032	1883.....	25,738,000 00	5.59	.....
1883.....	26,067,000	1884.....	25,494,120 00	.....	2.20
1884.....	24,387,120	1885.....	27,441,505 60	12.53	.....
1885.....	26,401,000	1886.....	30,294,269 50	14.74	.....
1886.....	28,510,090	1887.....	30,862,735 64	6.50	.....
1887.....	30,100,432	1888.....	30,277,750 15	0.58	.....

This table shows a gratifying reduction in annual rate of expenditure achieved, notwithstanding an increase in number of routes, in mileage (except in the steamboat service), in annual travel, and also in weight of mails. The decrease of 2.20 per cent. in the year 1884 was owing to the exceptional and extraordinary reductions made in the star service in 1883, in consequence of the frauds then recently discovered.

STAR SERVICE.

The annual rate of expenditure for this class of service on June 30, 1886, was \$5,352,181.

The number of routes was 13,245, of an average length of 233,915 miles and annual travel of 83,227,721 miles.

The cost per mile traveled was 6.43 cents.

A comparison with the last annual report shows for the fiscal year ended June 30, 1886, an increase of 874 routes, of 200,400 miles traveled per annum, and a decrease of \$62,623, in annual rate of expenditure. During the last fiscal year a careful inspection of the service and a re-adjustment thereof on a basis of the postal business transacted at the offices supplied, has resulted in a very large reduction in the cost.

The appropriation for the last fiscal year was \$5,900,000. The sum actually expended was \$5,443,296.89, leaving an unexpended balance of \$456,703.11.

The reduction in annual cost of star service effected by orders from July 1, 1885, to June 30, 1886, was \$301,479.

The contracts made during the last fiscal year for the performance of star service from July 1, 1886, to June 30, 1890, in the fourth section, embracing the States of Arkansas, Louisiana, Texas, Kansas, Nebraska, Colorado, Oregon, Nevada, and California, the Indian Territory, and the Territories of Dakota, Montana, Wyoming, New Mexico, Arizona, Utah, Idaho, and Washington, effected a saving of \$238,175.10 in the annual rate of expenditure, being 12 per cent. on the rate of annual expenditure in that section during the previous contract term, and represents a saving of \$952,700.40 for the ensuing 4 years.

The annual rate of expenditure for all the star service in operation on July 1, 1886, was \$5,091,225.28, being \$260,955.72 less than on June 30, 1886.

The number of routes in operation on June 30, 1886, was 13,245; on July 1, 1886, 13,961.

Attention is again called to the laws authorizing expenditures for expedition (section 3961, Revised Statutes, and the act of April 7, 1880), and it is suggested that the law be modified so as to read as follows:

Whenever it shall become necessary to increase the speed upon which mail is carried on any post route, the service shall be readvertised for the reduced running time required: *Provided*, That the contractor, with the consent of his sureties, shall have the option of continuing service upon the expedited running time, without additional compensation therefor.

The foregoing is now the rule of the Department. It is subject to modification or revocation at any time.

The appropriation for the current year is \$5,850,000; the sum estimated as necessary for the current fiscal year is \$5,200,000; leaving an unexpended balance at the close of the fiscal year of \$650,000. Estimated as necessary for the fiscal year ending June 30, 1888, \$5,500,000; being 5.98 per cent. less than the appropriation for the current year.

REGULATION WAGON MAIL SERVICE.

The regulation mail-wagon service is an outgrowth of the railway mail transportation—the extension of railroads, the increase in frequency of trips thereon, and the necessities of trade and commerce, requiring the Department to relieve the railroads of the performance of what is called terminal service in the great cities, the centers of trade and commerce. The requirement by the Department of the railroads to perform the service—that is, service between the post-offices and rail-

road stations and between railroad stations—would have been attended with great difficulties and annoying delays in the transfer of mails. This consideration led the Department many years ago to establish this branch of the service known as the regulation wagon mail service.

The following statement shows its present condition, the rate of expenditure, and the cities in which it has been established:

Annual rate of expenditure for regulation, mail messenger, mail station, and transfer service, in operation August 31, 1886.

Place.	Amount.	Place.	Amount.
Baltimore, Md.....	\$3,875 20	New York, N. Y.....	\$165,000 00
Boston, Mass.....	34,960 00	Omaha, Nebr.....	2,985 00
Brooklyn, N. Y.....	16,800 00	Philadelphia, Pa.....	27,360 00
Buffalo, N. Y.....	4,900 00	Pittsburgh, Pa.....	6,860 00
Burlington, Iowa.....	1,700 00	Providence, R. I.....	2,800 00
Charleston, S. C.....	2,496 00	Richmond, Va.....	2,000 00
Chattanooga, Tenn.....	1,490 00	San Francisco, Cal.....	8,000 00
Chicago, Ill.....	35,549 00	Saint Louis, Mo.....	16,900 00
Cincinnati, Ohio.....	8,997 00	Saint Paul, Minn.....	2,733 00
Cleveland, Ohio.....	4,990 00	Savannah, Ga.....	2,100 00
Kansas City, Mo.....	5,850 00	Toledo, Ohio.....	5,679 00
Knoxville, Tenn.....	1,497 00	Washington, D. C.....	9,678 54
Louisville, Ky.....	5,890 00	Wilmington, N. C.....	800 00
Memphis, Tenn.....	4,000 00		
Nashville, Tenn.....	2,792 00		
New Orleans, La.....	4,098 00		
		Total.....	336,406 74

This service is awarded by contract as star-route service, and is estimated for in the appropriation for that branch of the service and paid for out of that appropriation.

STEAMBOAT SERVICE.

The annual rate of cost of this class of service on June 30, 1885, was \$563,002; on July 1, 1885, \$554,078; on June 30, 1886, \$446,419, showing a reduction of \$116,583 since June 30, 1885, and \$107,659 since July 1, 1885.

The cost of steamboat service has been reduced in a greater ratio than that of any other class of service. This has been owing to two causes. First, the completion of new railroads on which postal service has been ordered in whole or in part; secondly, the greatly reduced price at which this service has been obtained by negotiations with the parties engaged in performing it.

The contracts for this class of service in the fourth section going into effect July 1, 1886, were made at an aggregate annual rate of \$50,923.44 less than the contracts superseded.

This sum represents an aggregate saving of \$203,693.76 during the contract term of 4 years, beginning July 1, 1886.

The appropriation for the current fiscal year is \$575,000; the annual rate of expenditure on August 31, 1886, was \$442,398; the sum deemed necessary for the current fiscal year is \$467,398; leaving an unexpended balance at the close of present year of \$107,602.

The amount deemed necessary for the next fiscal year is \$490,000, being 14.78 per cent. less than the appropriation for the current year.

INLAND AND FOREIGN STEAMBOAT MAIL SERVICE.

In the act of Congress approved March 3, 1885, making appropriations for the Post Office Department, the Postmaster-General is authorized to contract "for inland and foreign steamboat mail service when

it can be combined in one route, where the foreign office or offices are not more than two hundred miles distant from the domestic office, on the same terms and conditions as inland steamboat service, and pay for the same out of the appropriation for inland steamboat service."

Under and in pursuance of the power thus conferred this Department issued, on the 6th of October, 1885, proposals for carrying the mails of the United States, and such foreign mails as might be ordered, in safe and suitable steamships, from Tampa, by Key West, Fla., to Havana, Cuba, twice a week and back, from January 1, 1886, to June 30, 1888, on a schedule of 25 hours for the outward trip, and not exceeding 27 hours for the return trip. Under this advertisement two proposals only were submitted, but the amounts of the bids were deemed too high, and were declined by the Postmaster-General.

The commercial intercourse between the United States and Cuba, and the vexatious delays to which postal service between that island and the United States was subjected by reason of the inadequate character of the vessels engaged in its performance, induced the Postmaster-General in July last to contract with the owners of the steamer *Mascotte* and her consort for the establishment of a line of postal communication between Tampa, via Key West, to Havana, and return, beginning August 1, 1886, and terminating on the 30th of June, 1887, on schedules satisfactory to the Postmaster-General. By the schedules ordered under this contract this service is to be performed between Tampa, via Key West, to Havana, twice a week from August 1, 1886, to November 1, 1886, and three times a week from November 1, 1886, to May 1, 1887, and twice a week for the remainder of the contract term, with a running time of twenty-five hours, and is to be performed in close connection with the existing fast mail service from New York to Jacksonville and back, which fast mail service has, by recent legislation of Congress and by orders of the Postmaster-General, been extended to Tampa to make prompt connection with this new line of inland and foreign postal communication.

The establishment of this new line, furnishing, as it does, greatly increased facilities, will, it is believed, have a very beneficial effect upon commercial intercourse between this country and the island of Cuba. Heretofore the mails from any part of the United States to Cuba had first to be transported to New York and thence by steamship to Havana. This method entailed great delay in the transmission of intelligence. Through the agency of the fast line running from New York to Tampa the mails from any point in the United States can be concentrated on it and carried to Tampa, whence they will be dispatched via Key West to Cuba. The amount paid for this service for the contract term is \$54,456; but as an offset to this it is to be remembered that the Department, by the establishment of this new line, has been enabled to discontinue the steamboat route from Tampa to Key West, which was maintained at an annual cost of \$22,565.74, and also a foreign-mail route from Key West to Havana, which, as I am informed by the Superintendent of the Foreign Mail Service, cost, at the sea-postage rate, during the last fiscal year \$8,504.96. This makes the net cost of this new and important service only \$23,379.30. The performance of service on the two lines thus dispensed with was unsatisfactory both to the Department and to the public.

PAPERS ACCOMPANYING THE
MAIL-MESSENGER SERVICE.

The annual rate of expenditure for mail-messenger service on June 30, 1886, was \$834,860.

Compared with the last annual report, there has been an increase of twenty routes, and a decrease of \$44,357 in annual rate of cost.

The cost of this service depends on the growth of railway mail service, and keeps a certain ratio to it. It is ascertained that that ratio in expenditure is about \$8 to every mile of railway service.

The appropriation for the current year is	\$900,000
The sum deemed necessary for the current year is.....	860,000

Which will leave an unexpended balance at the close of the year of 40,000

The sum deemed necessary for the next fiscal year is \$900,000, the same amount as the appropriation for the current year.

Reduction in cost of mail-messenger service effected by orders from July 1, 1885, to June 30, 1886, was \$14,484.

RAILROAD TRANSPORTATION.

The annual rate of expenditure for railroad transportation on all adjusted service on June 30, 1886, was \$15,520,191, as against \$14,758,495 on June 30, 1885. The increase in the annual rate of cost during the past fiscal year was \$761,696, or 5.16 per cent., while the increase for the previous year was \$1,484,889, or 11.18 per cent. The increase for the past year is, therefore, but little more than one-half as much as the increase for the year preceding it. The increase in the annual rate of expenditure for transportation and railway post-office cars, taken together, during the past seven years, is shown as follows :

Year.	Length of routes.	Increase in length of routes.	Per cent. of increase in length of routes.	Cost per annum.	Increase in cost per annum.	Per cent. of increase cost per annum.
	<i>Miles.</i>	<i>Miles.</i>				
1880.....	85,320	5,329	6.66	\$10,498,986	\$981,896	9.73
1881.....	91,569	6,249	7.82	11,613,368	1,114,882	10.61
1882.....	100,563	8,994	9.82	12,753,184	1,139,816	9.81
1883.....	110,208	9,645	9.59	13,887,800	1,134,616	8.89
1884.....	117,160	6,952	6.80	15,012,603	1,124,803	8.09
1885.....	121,032	3,872	3.30	16,627,983	1,615,380	10.76
1886.....	123,933	2,901	2.39	17,336,512	708,529	4.29

It will be seen from the above statement that the increase in cost for these two large items of expenditure for the past year is considerably less than the increase for any year covered by the period named. This marked comparative reduction in the annual increase in cost is not attributable, as might be supposed, to a decrease in weight of mails carried, as the regular quadrennial readjustment weighing, which took effect in the past fiscal year, occurred in the first or eastern section, and showed the fair average increase of 11.12 per cent. of service in that section. Nor is it attributable to the fact, as the above table shows, that the increase in length of miles of railroad routes is less than any of the preceding years set down in the table, as that increase only falls short of the increase of the previous year, 1885, by 971 miles, and this decrease of mileage, and consequent decrease in rate of cost, is more than counterbalanced by the fact that there has been a closer adjustment of the compensation for railway mail transportation than has been known in the history of the Department.

The explanation of this reduction, it is confidently believed, is to be found, first, in the fact that during the past fiscal year there were no special weighings outside of the regular quadrennial weighings, although numerous applications were made by railroad companies for such special weighings, which were declined, the Department not perceiving their justice or their necessity. These special weighings necessarily result in an increase of cost. Secondly, in the fact, which will hereafter be more particularly alluded to, of the discontinuance of payment for apartment-car service, which payment had been made, although contrary to law, and the reductions in the pay of certain land-grant railroads which had not heretofore been known or treated by the Department as land-grant roads.

The policy of keeping the service as closely adjusted as possible, to which reference was made in the last annual report, has been adhered to, and with good results. On June 30, 1886, there were only 1,593 miles of unadjusted service on the books of the Department, as against 2,945 miles on June 30, 1885, 9,026 miles on June 30, 1884, 7,234 miles on June 30, 1883, and 8,449 miles June 30, 1882. This policy of keeping the adjusted service up to the actual service as nearly as possible necessarily results in an increase of the actual ascertained cost at the close of the fiscal year ended June 30, 1886, but it is in accordance with the sound maxim of public and private economy, "Pay as you go," and has also enabled the Department to state with greater accuracy its liabilities for railroad transportation at the end of the fiscal year.

The following table shows the average rate of cost per mile per annum for railroad transportation, based on the aggregate length of routes:

Years.	Length of routes.	Total pay for transportation.	Average rate per mile.
	<i>Miles.</i>		
1880	85,820	\$9,237,945	\$108 27
1881	91,569	10,249,261	111 92
1882	100,563	11,297,333	112 34
1883	110,208	12,288,799	111 50
1884	117,160	13,273,606	113 20
1885	121,032	14,758,495	121 95
1886	123,933	15,520,191	125 23

The increase, \$3.28 per mile, above shown is attributable in part to the reason before referred to, the closer adjustment of the service throughout the country, and to the quadrennial weighing in the eastern section, which resulted in an increase of \$439,158, or 11.12 per cent., on the cost of the service in that section on the preceding weighing.

REQUIREMENTS FOR THE CURRENT YEAR.

The appropriation for the curent year for railroad transportation is \$15,595,432. This is for the service exclusive of the Pacific roads, and will probably be more than will be required for the current year.

ESTIMATE FOR 1888.

It is estimated that \$15,867,962 will be required for the transportation of the mails on railroads for the fiscal year ending June 30, 1888, being an increase over the apprpriation of the present fiscal year of only \$272,530. The reasons in support of this estimate are fully set forth in the estimates furnished to the Postmaster-General under date of September 29, 1886.

RAILWAY POSTAL CARS.

There was an unexpended balance on June 30, 1886, of the appropriation for railway postal cars of \$73,578.20. This resulted from a discontinuance of allowance for postal apartment cars, a full statement of which will hereafter be given. The amount allowable under the act approved August 4, 1886, authorizing the Postmaster-General to allow compensation to such railroad companies as had furnished apartments in pursuance of an agreement or understanding that special compensation should be allowed for the time unpaid for, up to the date when the company was notified by the Department that such payment could not be made, because not warranted by the present law, aggregating \$18,403.57, will be paid from this unexpended balance.

The appropriation for the current year is \$1,808,000, and it is believed that this amount will be sufficient. It is estimated that \$1,934,560 will be required for this service for the next fiscal year, as stated in the estimate submitted to the Postmaster-General.

At the close of the fiscal year there were in operation two hundred and sixty-three lines of railway post-office cars, 40 feet in length and upwards, and for which additional pay is allowed, distributed as follows: Ninety-nine lines of 40 feet, ten lines of 45 feet, seventy lines of 50 feet, and seventy-three lines of 60 feet cars. A full and detailed statement of this important branch of the postal service is given in Table I of this Report.

The following statement shows the annual rate of increase or decrease in cost of railway post-office cars.

Year.	Cost.	Increase.	Decrease.	Increase.	Decrease.
				<i>Per cent.</i>	<i>Per cent.</i>
1880	\$1, 261, 041	.....	.....	.....	.....
1881	1, 864, 107	\$103, 066	.....	8. 17	.....
1882	1, 455, 851	91, 744	.....	6. 73	.....
1883	1, 599, 001	143, 150	.....	9. 83	.....
1884	1, 738, 997	139, 996	.....	8. 76	.....
1885	1, 869, 488	130, 491	.....	7. 50	.....
1886	1, 816, 321	.....	53, 167	.....	2. 84

SPECIAL FACILITIES.

The appropriation for special facilities on trunk lines for the fiscal year ending June 30, 1887, is \$291,000. The current expenditure on account of this fund is as follows:

Number of route.	Termini.	Railroad company.	Miles.	Pay.
5005.....	New York—Springfield.....	New York, New Haven and Hartford.	136. 00	\$17, 647 06
6011.....	4.35 a. m. train.....	New York Central and Hudson River.	144. 00	25, 000 00
10001.....	Philadelphia—Bay View.....	Philadelphia, Wilmington and Baltimore.	91. 80	20, 000 00
10013, 11001 (part)	Bay View—Quantico	Baltimore and Potomac	79. 80	21, 900 00
11001 (part).....	Quantico to Richmond	Richmond, Fredericksburgh and Potomac.	81. 50	17, 419 26
11008.....	Richmond to Petersburg	Richmond and Petersburg...	23. 39	4, 262 67
11009.....	Petersburgh to Weldon	Petersburgh.....	61. 00	11, 620 00
13002.....	Weldon to Wilmington	Wilmington and Weldon	162. 07	29, 577 77
14002.....	Wilmington to Florence	Wilmington, Columbia and Augusta.	110. 00	20, 075 00
14005.....	Florence to Charleston Junc. .	Northeastern.....	95. 00	17, 337 50
14004.....	Charleston Junc. to Savannah.	Charleston and Savannah.....	108. 00	19, 710 00
15009.....	Savannah to Jacksonville.....	Savannah, Florida and Western	171. 50	31, 238 73
16006.....	Baltimore to Hagerstown	Western Maryland	86. 60	15, 804 50
16018.....	} Jacksonville to Tampa..... {	Jacksonville, Tampa and Key West and South Florida.	242. 57	33, 281 49
16007.....				
Total .....	.....	.....	.....	\$291, 000 00

In the above tabular statement the cost between Jacksonville and Tampa is for eleven months only, as the service did not begin with the fiscal year. To maintain this service for the entire year the appropriation should be increased \$4,987.53, making a total of \$295,987.53, which will be required to maintain the present facilities during the next fiscal year. I recommend the continuance of this appropriation for the next fiscal year, as it enables the Department to secure important facilities in mail transportation not otherwise attainable.

The readjustment of the rates of pay to all railroad companies in States and Territories in which the contract term expired June 30, 1886, and also in other States on new routes and extensions upon which pay had not heretofore been fixed, are set out in detail in the Table H of annual report. The regular readjustment from July 1 last, occurred in the States of Arkansas, Louisiana, Texas, Kansas, Colorado, Nebraska, California, and Oregon, the Indian Territory, and the Territories of Arizona, New Mexico, Washington, Idaho, Montana, Wyoming, Dakota, and Utah. These readjustments have all been completed, and appear in Table H. It is said to be the first instance in the history of the service, under the present law, that all of the regular quadrennial readjustments have been completed in time to appear in the forthcoming annual report, as heretofore the publication of quite a number of adjustments, which were not completed in time, had to be delayed for the report of the succeeding year. The net increase in the above section, in consequence of the readjustment, is \$404,672, or 12.91 per cent. In the report of last year this increase was estimated at 12 per cent.

In closing this part of my report I desire to call attention to the importance of the work, performed in the Division of Railway Mail Adjustments. It calculates and adjusts the pay of all the railroad service, involving the largest single item of expenditure of the Department. The work demands constant revision, which often, as in the cases of payments for apartment cars and land-grant roads hereinafter referred to, leads to important results.

MAIL EQUIPMENTS.

Appended hereto is a tabular statement (O) of the number, description, prices, and cost of all mail-bags, mail-catchers, &c., purchased and put into service during the years ended June 30, 1886, and a tabular statement (P) of all mail locks and keys purchased for the service during the same period; also a tabular statement (N) of all contracts for mail equipments in operation on the 30th of June, 1886.

The total cost of mail-bags and mail-catchers, with their appurtenances and repairs, during the year, was \$268,138.36, the appropriation being \$275,000.

The number of mail-bags of every description put into service during the year was 212,362. Of these 28,350 were locked mail-bags of various kinds and sizes, used for letters and registered mail-matter, and 184,012 were tied mail-bags of various kinds and sizes used chiefly for printed and fourth-class matter.

The total quantity of mail-bags of all kinds purchased during the year, amounted to an increase of 20.9 per cent. compared with the quantity (175,640) purchased during the preceding year. This increase was rendered necessary to take the place of mail-bags worn out and become unsound, both in the domestic and foreign mail service (the increase in the latter service being 26,400 bags, and in the former service 10,322), and to supply the demands of a continually growing service, attended with increased bulk and frequency of mails throughout the country.

The amount expended for mail-catchers was \$2,328.

The amount expended for mail locks and keys during the year ended 30th June last, was \$19,995, the appropriation being \$20,000.

The appropriation of \$275,000 for "mail-bags and mail-catchers," and \$23,000 for "mail locks and keys," will, it is estimated, be necessary to provide for the expense which will be required by the service, for those objects, for the fiscal year ended June 30, 1883.

The increased expense of \$3,000 over last year for mail locks and keys is anticipated on account of the rapid extension of the through registered mail system, which will require for its regularity, expedition, and security increased quantities of the registered or detective mail-locks now used, which are necessarily very much more costly than mail-locks for other purposes.

As authorized by the first section of the act of Congress making appropriation for the service of the Post-Office Department for the fiscal year ended June 30, 1886, approved March 3, 1885, the sum of \$500 was paid to A. V. Lunger for the assignment of his patent, No. 209820, dated November 12, 1878, for a clamp for mail-bag cranes, the same having been paid out of the appropriation for mail-bags and mail-catchers.

STOCK IN SERVICE.

The total number of mail locks and keys in the service on the 30th of June, 1886:

Mail-bag locks.....	229,575
Street letter-box locks	31,549
Total number of mail-locks.....	261,124
Keys to mail-bag locks	65,408
Keys to street letter-box locks	5,520
Total number of mail-keys.....	70,928

Number of mail-bags in service on the 30th June, 1886, estimated from the average periods of their duration, and the quantity of new mail-bags put into service during such periods.

Locked mail-bags of every kind	149,009
Tied mail-sacks of every kind	533,612
Total number of mail-bags	682,621

FINES AND DEDUCTIONS.

The gross amount of fines and deductions from postal contractors and others during the year ended June 30, 1886, was.....	\$252,532 75
The amount of remissions on deductions on account of satisfactory explanation was.....	\$16,971 13
The amount of remissions of fines was	4,971 72
Making total remissions of fines and deductions of.....	21,942 85
Leaving the net amount of fines and deductions on account of railroad, star, and steamboat service for the fiscal year ended June 30, 1886, of..	230,589 90
To this are to be added fines imposed and deductions made from the pay of railway mail service employes for failures, of	\$3,872 11
And from mail messengers.....	2,316 12
Making total net deductions and fines for the fiscal year ended June 30, 1886, of	6,188 23
	236,778 13

The above amounts are classified as follows, viz:

Deductions and fines, railroad service.....	\$162,152 24
Deductions and fines, star service.....	62,015 12
Deductions and fines, steamboat service.....	28,365 39
Deductions and fines, mail messengers	2,316 12
Deductions and fines, postal clerks.....	3,872 11

Total deductions and fines from all sources of.....	\$258,720 98
Remissions, railroad service	16,450 86
Remissions, star service	4,144 81
Remissions, steamboat service.....	1,234 25
Remissions, postal clerks	112 93

Total remissions from all sources of.....	21,942 85
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Leaving net amount of deductions and fines for the fiscal year ended June 30, 1866, of.....	236,778 13
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DISCONTINUANCE OF PAY FOR APARTMENT-CAR SERVICE.

Soon after assuming the duties of Second Assistant Postmaster-General my attention was called to the fact that the Department was then allowing pay to certain railroads for apartment cars—that is, postal cars less than 40 feet in length—in addition to the compensation prescribed by law for weight of mails carried by them.

An examination of sections 4002, 4003, and 4004, Revised Statutes, led me to the conclusion that such additional allowances were not warranted by law. The question was presented for your consideration, and was, by your direction, submitted to the Assistant Attorney-General for this Department. This officer, in an elaborate opinion, in which he fully reviewed the history of the above sections of the Revised Statutes, held that these allowances for such apartment-car service could not be lawfully made.

In accordance with this opinion, orders were made discontinuing these payments in future. The sums paid to railroad companies on this account amounted to \$80,161.73 annually, and from July 1, 1873, the date when the existing law prescribing the compensation for railroad companies went into effect, up to the date of the discontinuance, the aggregate amount paid was \$979,959.67. By their discontinuance a reduction has been effected in the annual rate of expenditure for railway post-office cars of \$80,161.73. This action taken by the Department led to remonstrance and complaint on the part of some railroads which had been the recipients of this illegal compensation, but a majority of the companies affected by the discontinuance acquiesced in the decision of the Department when it was made known to them that such allowances were unlawful, and, with a single exception have continued to furnish the necessary apartment-car space without specific compensation therefor, as all railroad companies are required to do by section 4002, Revised Statutes. A full and complete tabular statement, showing the amount of the allowances, the railroad companies to which they were paid, and the annual and aggregate amounts, has been prepared, and a copy of this statement, together with my letter to you, and the opinion of the Assistant Attorney-General, is herewith appended.

ADJUSTMENT OF PAY OF LAND-GRANT RAILROADS.

The thirteenth section of the act of July 12, 1876 (19 Statutes at Large, page 82) provides—

That all railroad companies whose railroad was constructed in whole or in part by a land grant made by Congress, on the condition that the mails should be transported over their road at such price as Congress should by law direct, shall receive only eighty per cent. of the compensation authorized by this act.

The grants of lands made to a number of important roads, such as the Union Pacific, Central Pacific, Texas Pacific, Sioux City and Pacific, Oregon and California, Burlington and Missouri River (in Nebraska), and others, did not contain the above condition, and consequently the deductions required by the above section of the statute does not and cannot be made to apply to them.

With a view of ascertaining whether any of the railroads subject to this condition in the matter of transportation, on account of grants of lands, had been omitted from the list of land-grant railroads kept in this Department, an investigation was recently made, and it resulted in the disclosure of the fact that a number of railroads subject to the above condition on account of the grants of lands to them by Congress had been omitted and that these roads had been paid the full rates allowed by law for transportation of mails instead of only eighty per cent. On the discovery of this fact orders were made directing the deductions from the compensation of such roads, to the amounts thus overpaid them covering the entire period from July 1, 1876, or from the time the service was established, to the close of the past fiscal year; also directing that these deductions be made from the payments of these railroads in future. The total deductions amounted to \$69,647.91 for the above-named period, besides which there was effected a reduction in the annual rate of expenditure in future for railway mail transportation of \$12,176.07.

A tabulated statement hereto appended shows the roads and the amounts deducted.

Route.	Railroad company.	Amount deducted up to June 30, 1886.	Annual rate of deductions from July 1, 1886, based upon present weights.
Part 31009	Texas and Pacific	\$3, 106 86	\$240 06
26027	Chicago, Saint Paul, Minneapolis and Omaha	286 80	41 25
Part 26008	Saint Paul and Duluth	776 92	108 50
24009}	Michigan Central	30, 535 44	6, 191 94
24013}			
Part 17012	Louisville and Nashville	1, 760 56	247 41
Part 17015	Alabama and Great Southern	2, 898 72	500 46
Part 18004	Mobile and Ohio	1, 891 70	460 29
Part {16011}	Florida Railway and Navigation Company	4, 653 63	1, 225 81
16019}			
25015	Wisconsin Central	7, 468 56	879 92
25023	Chicago, Milwaukee and Saint Paul	4, 240 24	467 22
Part 26009	.....do	560 58	136 03
26044	.....do	349 46	103 21
26012	.....do	1, 116 36	170 18
Part 27012	.....do	1, 480 64	289 44
Part 27024	Chicago and Northwestern	169 00	26 67
24005	Lake Shore and Michigan Southern	6, 607 08	803 89
46034	Southern Pacific	1, 745 86	183 69
Total		\$69, 647 91	\$12, 176 07

DEDUCTIONS FROM LAND-GRANT ROADS.

The total amount deducted per annum from pay of land-grant roads, as required by the thirteenth section of the act of July 12, 1876, is \$396,080.54.

PROPOSED CHANGE IN THE METHOD OF COMPENSATING RAILWAY COMPANIES FOR MAIL SERVICE.

In my last annual report I referred to the fact that I was then, at your suggestion, engaged in the investigation of railway transportation, with the view of ascertaining if some method of compensation therefor could be devised more equitable and economical than the present method. In

prosecuting this inquiry I had the valuable assistance of Mr. W. E. Parsons and of Mr. A. B. Hurt, the superintendent of railway mail adjustments, and the results are embodied in the report which I have the honor herewith to submit.

During the fifty years which have elapsed since the establishment of mail service upon railroads the question of the proper basis of adjusting their compensation has been the subject of anxious consideration on the part of the Department and of frequent action by Congress.

The first piece of legislation on this subject, the act of 1838, adopted a method which was convenient and ready to hand, namely, the then existing basis of payment for mail transportation on post-routes, and by a short cut declared each and every railroad route a post-route, and directed the Postmaster-General to cause the mail to be transported thereon, not paying therefor more than 25 per cent. above what similar transportation would cost in post-coaches. The amount of this pay was, by the act of 1839, limited to \$300 per mile. By the act of 1845 the Postmaster-General was directed to arrange the railroad routes into three classes, according to the size of the mails, the speed with which they are conveyed, the importance of the service, and limiting the maximum amount of pay for the first class to \$300 per mile, for the second class to \$100 per mile, and for the third class to \$50 per mile. This left to the Postmaster-General, as will be seen, a very large discretion in the matter of adjusting compensation, as it made him, in arranging the three classes of the railroads, the judge of the size, the weight of the mails, and the importance of the service.

In the then condition of the railroad service this was probably as judicious an arrangement as could be devised. While providing the maximum of pay for the three classes, it had the merit of enabling the Postmaster-General to graduate the pay according to the service, and to take into consideration all the factors that enter into the problem of railway mail transportation in fixing the compensation of any particular road.

In 1873 Congress passed the act which still regulates the compensation of railroads, modified by the acts of 1876 and 1878, authorizing the deductions of 10 and 5 per cent., respectively, from the pay of the companies.

These three acts were coincident with three marked stages in the growth and development of the railroad mail service.

In 1864 the system of distributing the mails in transit through the agency of railway post-office cars had been established. It is not going too far to say that the introduction of this system has wrought a complete revolution in the whole Railway Mail Service.

The method of payment established by the act of 1873 is obnoxious to the objection that it establishes two standards of valuation, one for weight and one for space, and the necessity for its revision soon became apparant. The object desired and to be sought for is one uniform and simple measure of value for the entire service performed. It is conceded alike by the Department, the general agreement of sentiment among the officers of railroad companies, and by all those who have made this matter the subject of study and investigation.

The Senate Committee on Transportation of 1874, the special commission appointed by the President under the act of 1876, known as the Hubbard Commission, and the commission of 1883, composed of officers of this Department, all concur in recommending space as the basis of pay. This general consensus of opinion in favor of fixing space alone as the basis of compensation, instead of the double system now existing of pay-

ing separately both for weight and for space by an arbitrary and rather procrustean standard, affords very strong and pregnant presumption in favor of the adoption of such a rule. No one familiar with the practical operations of the railway mail service can, I think, doubt the fact that such a basis of compensation is more in accordance with the necessities and requirements of the service, and would be, it is confidently believed, more satisfactory to the Department and to the railroad companies as being both more equitable in its application and more economical in its results.

The questions involved in the problem of ascertaining the proper basis for the compensation of railroads for mail transportation were as fully and as thoroughly examined as time would allow, and with the aid of the light furnished by those who have gone before us in the same field of investigation. It will be seen that the report concurs with all previous investigations that the service has outgrown the present system of pay. Experience and the growth of the railway mail service have furnished additional proof of its incongruities and inequalities, and the time has come either for a very thorough and radical revision of the present system or for the substitution of an entirely new one, if we wish to keep the rate of expenditure for the service within the limits of any reasonable control. This report, however, it is proper to say, is not by any means submitted as the last expression on this important and interesting subject. It claims no such high prerogative. But the scheme which it suggests is recommended as the best temporary expedient for the present, suitable to the service, proceeding on the lines of the present arrangement, without departing too much therefrom—which departure, if made in the light of present information, might justly be regarded as too experimental—and enabling the Department to better control the rate of annual expenditure until provision shall be made, as you suggested in your last report in regard to this question, for “the most particular, yet comprehensive and judicious inquiry into all the circumstances and elements which affect that subject.”

An inquiry of this exhaustive nature, however, would necessarily be a protracted one. In the mean time the rate of expenditure for this branch of mail transportation, keeping pace with the growth of the population, the spread of intelligence, the extension of railroads, and the development of the railway post-office system, is steadily increasing; and if, pending such an inquiry—should it be entered on—a plan sufficiently authenticated to your approval and that of Congress as a safe, conservative, and an economical one could be adopted, it is greatly to be desired.

The plan submitted is recommended as possessing such features. While providing a new rule for adjusting compensation this rule is so closely related to the present one as to admit of ready application to the existing service, and while reducing the present rate of expenditure, and keeping that rate in future within more economical limits, it does not so seriously affect the pay of the railroads as to form a disturbing element in the relations between them and the Department. The pay of railroads carrying small weights of mail is not appreciably reduced. The greatest reductions effected by it will fall on railroads carrying heavy weights of mail and receiving large remuneration. These reductions, however, will be so distributed as not to affect seriously any particular road, and they will, it is believed, be more than compensated for by the satisfactory results flowing from the establishment of a basis of pay more intelligible and equitable than the present one, and less liable to invite those arbitrary methods of abatement of which so much complaint is now made by the railroad companies.

For the purpose of more conveniently comparing the present with the proposed rates of railroad pay, the following tables are here given. Table 1 shows the present rates; table 2, the rates under the proposed plan, and table 3 shows the difference between them, up to a weight of 5,000 pounds.

TABLE 1.

Average weight of mails, whole distance per day.	Pay per mile per annum of route's length.				
	Under act of March 3, 1873.	Reduction of 10 per cent. under 1st section of act of July 12, 1876.	Reduction of 5 per cent. additional, under act of June 17, 1878.	Reduction of 20 per cent. additional to the 10 and 5 per cent., under 13th section of act of July 12, 1878 on land-grant railroads.	Weight warranting allowances of 1 per mile, under act of March 3, 1873, at the several rates of pay.
					Pounds.
200 + 300 = 500 pounds.....	\$50 00	\$45 00	\$42 75	\$34 20	
500 + 500 = 1,000 pounds.....	75 00	67 50	64 13	51 30	12
1,000 + 500 = 1,500 pounds.....	100 00	90 00	85 50	68 40	20
1,500 + 500 = 2,000 pounds.....	125 00	112 50	106 88	85 50	20
2,000 + 1,500 = 3,500 pounds.....	150 00	135 00	128 25	102 60	20
3,500 + 1,500 = 5,000 pounds.....	175 00	157 50	149 63	119 70	60
5,000 + 1,500 = 6,500 pounds.....	200 00	180 00	171 00	136 80	60
6,500 + 2,000 = 8,500 pounds.....	225 00	202 50	192 38	153 90	80
For every additional 2,000 pounds.....	25 00		21 88	17 10	80

TABLE 1—Continued.

Railroad post-office cars.	Per daily line.	Per linear foot.
		Ounces.
40 feet	\$25 00	63½
45 feet	30 00	65½
50 feet	40 00	80
55 feet	50 00	90½
60 feet	50 00	93½

TABLE 2.—Proposed plan for payment by space.

Pounds.	Space in feet.	Per mile.	Pay (six times a week) or as often as trains may run.	
			Per foot per mile of road.	Per foot per mile run, in miles.
200	5	\$40	\$8 00	12.75
500	15	60	6 00	9.56
1,000	15	80	5 33	8.52
2,000	25	120	4 80	7.68
4,000	40	180	4 50	7.19
5,000	45	200	4 44	7.09

TABLE 3.—*Present rate and proposed rate of pay contrasted.*

Average daily weight.	Required space.	Present pay per mile of road, including allowance for railway post-office cars for six times a week, or as much oftener as trains may run.	Proposed pay per mile of road for six times a week or as much oftener as a train may run. (This includes a two-way post-office car.)
<i>Pounds.</i>	<i>Feet.</i>		
200	5	\$42 75	\$40
500	10	84 12	80
1,000	15	126 00	120
2,000	26	128 25	120
4,000	40	*181 47	180
5,000	45	*201 06	200

*Including allowances for railway post-office cars.

For all intermediate space between these fixed grades a pro rata pay would be allowed, as is now the practice in regard to intermediate weights, as shown in last column of Table 1.

The additional space above 45 feet, when required, is to be determined by the Postmaster-General, and is to be paid for at the uniform rate of \$2.70 per linear foot. The linear foot refers to an inside measurement, with the minimum car width of 8 feet 6 inches, or its equivalent, in floor space. It is to be further remarked that these rates cover the entire cost of the whole railroad service, all postal cars to be properly equipped, warmed, and lighted, fitted up with furniture, fixtures suitable and convenient for the transportation and distribution of the mails and the transportation of postal clerks and other post-office officials designated by the Postmaster-General.

It may be here said that this plan is liable to the same objection which is urged against the present system of pay, namely, that the cost of it will increase in proportion to space required just as the cost of the present system increases in proportion to increase of weight. But the difference between the two methods is this: Under the existing law, if any weighing shows an increase of weight on any particular road, that road is entitled to claim an increase of pay according to the ratio of pay to weight, as fixed by the law. Under the proposed plan, although a weighing should result in an increase of weight, it would not increase the pay unless additional space was thereby rendered necessary.

That an increase of weight does not necessarily require an proportional increase of space is shown by the following facts:

Under the last quadrennial weighing in the first or eastern section, in 1885, the increase in the weights resulted in an increase of \$439,153, or of 11.12 per cent. per annum on the previous rate of compensation of railroads in that section. But the increase in railway post-office car space in that section has been only 20 feet, costing \$5,867. In the western or fourth section the adjustment made this year shows an increase of \$404,672, or 12.91 per cent., caused by increase of weight, while there has been no increase of railway post-office car space as yet ordered. Applications are pending, it is true, for additional railway post-office cars in this section; but if all these applications should be granted—and it is not likely they all will be—the additional cost would be very small in comparison with the amount of the increase in cost just stated as resulting from the increase in weight of mail matter.

The total annual rate of cost for railroad service on October 31, 1885, was \$17,130,827.80. The scheme proposed was applied to a large number of railroads, the aggregate of whose pay, as ascertained, amounted to \$16,218,797.80 of this total sum, being 95 per cent. of the entire railroad service of the whole country. Assuming that the rate of reduction would remain uniform for the amount of service not computed, viz, \$911,830, the result of the application of the committee's plan was a reduction of about \$850,000 in the total rate of expenditure for railroad service as that expenditure stood on the last-mentioned date.

In applying this scheme it is to be remembered that the mails carried and worked in post-office cars were alone considered. Table C^o of the Postmaster-General's report of 1885 shows that a large amount of mail is carried in bulk, and is paid for according to weight, at the rates stated in table 1 above, the least weight taken into account being 200 pounds, at \$42.75 per mile of road. Now, for this closed mail the same allowance of space would not be given as is allotted in table 2 to the same weight of mails worked or distributed in railway post-office cars.

The best authorities give one linear foot of a railroad car of the standard width of 8 feet 6 inches as sufficient space for 500 pounds of ordinary mail matter carried in bulk, that is, 2 linear feet for every 1,000 pounds, which at \$2.70 per foot would be \$5.40; the same weight of worked mail would require 10 feet, at \$2.70 per foot (\$13.50), making a difference of \$8.10 per mile of road for every 1,000 pounds of mail carried in bulk. This would increase considerably the above amount of \$850,000, which, it is believed, would be saved by the establishment of the space gauge of pay. The discrimination between closed and worked mails is intended to apply only to railroads carrying more than 5,000 pounds. Its application to roads carrying less than 5,000 pounds is deemed inadvisable, as it would reduce too much the compensation of roads carrying small weights. The report proposes payment for car space required in actual transit only, and it is to be noted that it differs in its recommendations from those which have preceded it on the same subject in two important particulars. It omits to recommend, first, any change in the performance of side service by the railroads, requiring them still to perform it, and, secondly, any additional pay for increase of frequency in trips or of speed. Speed and frequency are conceded to be very important factors in the question, and the omission of their consideration seems to require an explanation. It is believed that the Department can safely depend for the securing of these two elements upon the competition between railroads for the immense passenger traffic of the country. This it does now, and generally with satisfactory results to the public and to the Department, and without any injustice to the railroads. For the rates proposed to be paid under the plan submitted would entitle the Department to require that the mails should be carried on the fastest trains and as often as trains run. A greater rate of speed, and greater frequency than would be thus furnished, would seem to be hardly attainable, or even necessary, regard being had to the service in its entirety.

If on certain great through routes of railroad communication it might at any time be deemed necessary to expedite the service on schedules faster than those of the regular passenger trains thereon, that object could be attained, as at present, by special appropriations, or special arrangements with companies accumulating the mail on such routes, and then requiring more space, at the fixed additional pay therefor.

Were a general provision authorizing the Postmaster-General to pay special rates for special speed and frequency incorporated in the law,

its application would sooner or later have to be made uniform and universal, in which cases the cost of the service would be augmented immensely, or it would only be made in exceptional cases, in which contingency such provision would defeat its purpose and be of comparatively little value to the service considered as a whole, as what would be gained in these particulars on one road would be lost on another. In making such a partial exercise of the power thus conferred the Department would constantly incur, however just and reasonable might be the grounds of discrimination, the charge of favoritism, and a sense of injustice would be thus engendered, inconsistent with those harmonious relations which, for the good of the service, it is at all times desirable, should subsist between the railroads and the Department. It would open the door to those inequalities and incongruities in the pay and service of the roads which it is eminently desirable to remove and abolish, as they are the main causes of whatever friction and difficulty the Post-Office encounters in its transactions with railroad companies.

Large as is the sum paid out annually by the Government to railway companies for mail transportation and post-office cars, being in amount nearly equal to 9 per cent. of their total gross earnings from passenger traffic, and in the case of some few companies forming a much larger percentage according to the statistics of railroad earnings in 1885, yet it is doubtful if any of the more important railroads, links in great lines of intercommunication, whose time-tables are made up solely with reference to their large and valuable passenger traffic and their connection with other lines, would accept the special rates for these special facilities under the conditions it would be necessary to impose to secure the performance of the expedited service, unless the rates were far larger than any which have been heretofore suggested, and any which the Department ought to give. On the other hand, roads with a small number of passengers, running through sections of the country sparsely inhabited and carrying small amounts of mail, would be frequent and urgent solicitors for increase of speed and frequency when and where they were least needed, to eke out their slender revenues.

For these reasons, and others which might be suggested did time and space allow, taking the whole mass of the railroad mail service into consideration, and seeking a rule for adjusting pay, simple, uniform, and general in its application, I concluded to eliminate from the problem space and speed as distinct and independent factors entitled to special and additional compensation.

Without consuming more time in the exposition of the advantages of the proposed system of space gauge over weight gauge as a basis of railway mail compensation, of its simplicity, its uniformity, and its economy in results, I respectfully submit for your consideration the annexed report and its recommendations.

In concluding this report it is my duty, and I take pleasure in discharging it, to bear testimony to the faithful and satisfactory manner in which the chief clerk of this Bureau and the heads of divisions have performed their important and responsible duties. To the whole clerical force of the office my acknowledgments are due in like manner.

I append a statement (Exhibit 1) of the work of the office during the last fiscal year.

Very respectfully,

A. LEO KNOTT,
Second Assistant Postmaster-General.

HON. WILLIAM F. VILAS,
Postmaster-General.

REPORT OF THE GENERAL SUPERINTENDENT OF RAIL-
WAY MAIL SERVICE.

POST-OFFICE DEPARTMENT,
OFFICE OF GENERAL SUPERINTENDENT OF
RAILWAY MAIL SERVICE.
Washington, D. C., October 11, 1886.

SIR: I have the honor to hand you herewith my annual report for the year ended June 30, 1886, consisting of tabular statements showing the work done during the year, and the standing of the service at its close, together with statements of appropriations for the current year and the manner in which they are being expended. Also, estimates covering the necessities of the service for the next fiscal year.

As regards the operations of the service during the year just closed, I have the honor to invite your careful attention to the tables hereto appended, which, I think, clearly show that the service, through the earnest efforts and hearty co-operation of officers and men, continues to maintain the high standard of efficiency attained in years past, and has afforded to the public improved facilities and increased accommodation, as opportunity offered or experience suggested.

The tabular statements accompanying this report are lettered from A^a to M^m (excepting J^j), and may be summarized as follows:

TABLE A^a.—RAILWAY POST-OFFICE LINES.

On the 30th of June, 1886, the railway post-office lines in operation numbered 871, occupying 435 whole cars and 1,769 apartments in cars. The aggregate length of railroad routes over which these cars ran was 110,672.30 miles, and the annual miles of railroad service performed by clerks is shown to have been 100,923,910. The total number of railway postal clerks in the service on the 30th day of June, 1886, was 4,573 (including 15 vacancies temporarily filled by acting clerks not borne on the rolls of the Department); of that number 4,512 were appointed to railway lines and 61 to steamboat lines.

The increase in the more important items embraced in Table A^a is shown in the following abstract of that tabular statement:

	1886.	1885.	Increase.
Number of railway post-office lines	871	858	13
Number of postal clerks at work on lines	4, 126	3, 972	154
Whole number of postal clerks in the service.....	*4, 573	†4, 389	184
Whole distance run daily by clerks from register to regis- ter (miles).....	123, 745. 15	121, 328. 88	2, 416. 27
Miles of railroad over which clerks run.....	110, 672. 30	107, 506. 05	3, 166. 25
Annual miles of railroad service performed by clerks.....	100, 923, 910	96, 401, 800	4, 522, 110
Number of cars and apartments in cars in use and in re- serve.....	2, 204	2, 165	39
Number of pieces of ordinary mail handled.....	5, 329, 521, 475	4, 948, 059, 400	381, 462, 075
Number of registered packages and cases handled.....	15, 525, 993	15, 890, 934	‡364, 930
Number of through registered pouches (including through registered sacks) handled	738, 571	723, 243	75, 328

* Including 61 clerks appointed to steamboat lines. } See Table B^b.
† Including 75 clerks appointed to steamboat lines. }
‡ Decrease.

TABLE B^b.—STEAMBOAT MAIL SERVICE.

The steamboat mail lines upon which postal clerks were employed have been considerably reduced during the year, owing to the changes and extensions in railroad and star-service routes, which have been utilized in order to give better mail facilities to the sections supplied than could be afforded by water transportation. The decreases shown by this table are as follows :

In number of lines.....	3
In number of clerks employed upon lines.....	14
In miles of route run by clerks	229
In annual miles of service performed by clerks.....	209,583
In number of mail apartments.....	22

The total miles of route in operation June 30, 1886, was 5,951.53; the total annual miles of service performed was 1,854,281, and the annual average distance run by each clerk in the performance of duty was 30,398 miles.

TABLE C^c.—CLOSED POUCH SERVICE.

This table contains a detailed statement of mail service performed by means of closed pouches upon railroads and parts of railroads over which the railway postal-car system has not been extended.

Service of this nature is usually placed on new roads, and also on lines running through sparsely settled regions where the amount of postal business required to be done will not warrant the more expensive service by clerks; also upon short connecting links of road where the services of a clerk are not deemed necessary. This service is, from year to year, being gradually absorbed by the railway post-office system.

The increase in the number of closed-pouch lines, as shown by this table, was 19, and the increase in the number of pouches exchanged daily was 1,210. A decrease of 278.44 miles in the length of routes over which this class of service is performed is shown.

TABLE D^d.—COMPARISON.

This is a comparative statement of the railway mail service from 1830 to and including the fiscal year ended June 30, 1886, and would seem to require no explanation.

TABLES E^e, F^f, AND G^g.

Table E^e is a statement, by divisions, of the amount of mail distributed in railway postal cars *en route*. During the year there were handled, by postal clerks, 5,329,521,475 letters, postal-cards, and other pieces of ordinary mail matter, besides 16,324,569 pieces of registered matter, for which receipts were exchanged, records kept, and other necessary duties performed to insure the safety and security of the registered mail. This shows an increase over the amount of labor performed during the fiscal year ended June 30, 1885, of 7.70 per cent. in the number of pieces of ordinary mail-matter, and a decrease of 1.74 per cent. in the number of pieces of registered matter handled during the same period. The decrease in the number of pieces of registered matter is, undoubtedly, caused by the extension of the through registered pouch system, which, while lessening from year to year the number of separate registered packages to be handled, causes a large increase in the

number of registered pouches and inner-registered sacks. The increase in the number of registered pouches handled was 42,863, and of inner-registered sacks 32,619, making a total of 75,482 pouches and sacks, as against a decrease of 365,090 single pieces of registered matter.

TABLE F', ERRORS IN DISTRIBUTION.—In handling the immense number of pieces of mail matter covered by Table E° (namely, 5,329,521,475) 1,260,443 errors in distribution were committed, or one error for every 4,228 pieces handled. The percentage of mail correctly distributed in 1886 was 99.976 per cent. and 99.984 in 1885.

TABLE G', ERRORS MADE BY POST-OFFICES.—This statement of errors, made in the distribution and forwarding of mails by post-offices of the first and second class, is not quite so favorable an exhibit as the one for the previous year. The increases over the number of errors reported for the fiscal year ended June 30, 1885, are as follows:

Incorrect slips	53,974
Errors on incorrect slips	106,525
Letter packages missent.....	1,214
Pouches missent.....	3
Sacks missent.....	42
Registered packages missent.....	157
Letter packages misdirected.....	345
Pouches misdirected	101
Sacks misdirected.....	37

TABLES H^a AND I^a.—CASE EXAMINATIONS.

Table H^a is in reference to the case examination of permanent railway postal clerks, and from which it appears that 5,962 examinations were held in the several divisions of the service during the year. At these examinations 6,572,130 cards were handled by those under examination. Of this number 5,364,972, or 81.61 per cent., were correctly distributed. The increase over the report of last year in the number of examinations was 473, and 13.5 per cent. in the average number of cards handled at each examination. There was a decrease of .62 per cent. in the average number of cards correctly distributed. This decrease is attributable to the fact that more than the usual number of new clerks had served the probationary term and been transferred to the permanent roll during the year; and, for want of time, the examiners have not, as a rule, re-examined those whose records were above the maximum, but have given more attention to the re-examination of those who have made the poorest records. This action has, as a matter of course, caused a reduction in the average made by the whole number.

Table I^a is a statement of case examinations of probationary clerks. There were 5,113 examinations of these clerks held during the year, which is an increase of 1,797. Of the number of cards handled, namely, 4,032,678, 76.71 per cent. were correctly distributed, being a better showing by 8.58 per cent. than the one for last year.

The aggregate number of cards handled by both permanent and probationary clerks was 10,604,808, of which 8,458,283, or 79.76 per cent., were correctly distributed, a better showing by 1.78 per cent. than that of last year.

Table I^a also shows that 1,516 probationary appointees were examined, as against 1,640 during the previous year, a decrease of 124.

The number of clerks dropped from the service during probation, including those permitted to resign, was 429, or 28.3 per cent. of the whole number. This is a much smaller percentage than was reported last year (37.5 per cent.), and, in proportion to the number examined, the number of failures is smaller than for several years past.

TABLE K².

This table shows the railway post-office lines by divisions, giving the number of miles run, the average miles run by the crews of each line, and the daily average of each division.

The daily average of all lines in the United States is 121.76 miles. Many of the lines included in this table are very short ones, which causes a reduction in the average of the longer lines, but if the average miles run daily by crews of any particular line is desired it can be ascertained by referring to this table.

TABLE L¹.—NEW SERVICE.

The railway postal-car service established and service extended, including new service placed upon old lines, is set forth in detail in this table. This table also shows the increase in railroad service on lines upon which no railway post-office service has been ordered during the year.

TABLE M^m.—STATEMENT OF ANNUAL SALARIES OF RAILWAY POSTAL CLERKS BY CLASSES.

On the 30th of June there were 4,573 railway postal clerks, of the several classes engaged under the supervision of this office, in the distribution of mails on railroad and steamboat lines, as transfer clerks at railroad centers, or in the performance of the clerical work incident to the service, with annual salaries aggregating \$4,567,645, or an average per clerk of \$998.82. It will be noticed upon referring to this table that the salaries range from one dollar per annum, that amount being paid to certain employes of steamboat lines as compensation for taking the oath required by law of all persons engaged in handling the mails, to \$1,400 per annum, which is the maximum rate of compensation allowed by law.

SEPARATION OF MAIL FOR CITY DELIVERY.

A tabular statement, showing the quantity of letter mail separated for city delivery, will be found appended to this report, by which it will be seen that very fair progress has been made during the year in the effort to make this separation a special feature of the service. It may be well to explain in this connection that this special separation of the letter mail is made in railway post-offices which do not reach the cities for which the separations are made until too late to enable the post-offices to arrange it in time for the first carrier delivery. By means of this system the post-offices are relieved of much of the labor of handling this mail, and it is now placed in the hands of the carriers in time for their first trip, several hours being gained thereby in the delivery to addressees.

The aggregate number of letters arranged in railway post-offices for delivery by letter-carriers to addressees during the fiscal year ended June 30, 1886, was 129,025,155 (exclusive of 25,328 pieces of paper mail for Saint Paul, Minn.), the increase over the number of letters reported for the previous year being 47,311,033, or 36.66 per cent.

Statement of separations of mail for city delivery, by cities, &c.

Division.	City.	Packages distributed.	Packages undistributed.	Incorrect slips.	Errors.	Letters distributed (75 to the package)	Pieces of paper mail as per actual count.
First	Boston, Mass.	189,568	1,789	69	90	14,217,228	.....
Second	New York, N. Y.	714,117	8,804	8,800	16,535	53,033,775	.....
Second	Philadelphia, Pa.	129,234	1,424	219	404	9,692,550	.....
Second	Washington, D. C.	80,887	230	102	114	2,315,025	.....
Third	do	101,616	521	311	400	7,421,200	.....
Fifth	do	161,480	.....	.....	.....	12,111,000	.....
Fifth	Cincinnati, Ohio.	120,145	.....	.....	.....	9,010,675	.....
Sixth	Saint Paul, Minn.	14,384	.....	.....	109	1,102,130	25,328
Sixth	Minneapolis, Minn.	29,556	.....	.....	5,551	2,210,200	.....
Eighth	San Francisco, Cal.	233,447	25	898	1,001	17,500,515	.....
Eighth	Portland, Oreg.	2,622	.....	.....	.....	100,650	.....
Total. ....	.....	1,727,031	10,863	11,399	24,275	129,015,155	25,328

SPECIAL FACILITIES.

The amount appropriated for special facilities, on trunk lines, for the fiscal year ended June 30, 1886, was \$266,764, a portion of which was expended as follows, and the balance covered into the Treasury:

Route.	Railroad company.	Distance.	Amount paid.
		<i>Miles.</i>	<i>Dollars.</i>
New York and Springfield.....	New York, New Haven and Hartford.	180.00	17,647 06
The 4.35 a. m. train.....	New York Central and Hudson River.	142.00	25,000 00
Philadelphia to Bay View.....	Philadelphia, Wilmington and Baltimore.	91.80	20,000 00
Bay View to Quantico	Baltimore and Potomac	80.00	21,900 00
Quantico to Richmond	Richmond, Fredericksburgh and Potomac.	81.50	17,419 26
Richmond to Petersburg.....	Richmond and Petersburg	23.29	4,197 50
Petersburgh to Weldon.....	Petersburgh	64.00	11,680 00
Weldon to Wilmington	Wilmington and Weldon.....	102.07	29,565 00
Wilmington to Florence.....	Wilmington, Columbia and Augusta ..	110.00	20,075 00
Florence to Charleston Junction.....	Northeastern Railroad of South Carolina.	95.00	17,337 50
Charleston Junction to Savannah.....	Charleston and Savannah	108.00	19,710 00
Savannah to Jacksonville	Savannah, Florida and Western	171.50	31,390 00
Baltimore and Hagerstown	Western Maryland.....	86.60	15,804 50
Total expended .....	.....	.....	251,725 83
Amount unexpended.....	.....	.....	15,038 18
Amount of appropriation .....	.....	.....	266,764 00

As stated in my last report, it was designed to make an expenditure of \$14,963 for service between Columbia, S. C., and Augusta, Ga., but the president of the Charlotte, Columbia and Augusta Railroad Company declined to accept the proposition of the Department, and this amount is, therefore, included in the unexpended balance of \$15,038.18.

The amount appropriated under the act of Congress approved June 30, 1886, for necessary and special facilities on trunk lines for the fiscal

year ending June 30, 1887, was \$291,000. This amount is being expended as follows:

Terminals.	Railroad company.	Miles.	Amount.
New York and Springfield.....	New York, New Haven and Hartford..	136.00	\$17,047 08
The 4.35 a. m. train	New York Central and Hudson River.	144.00	25,000 00
Philadelphia to Bay View	Philadelphia, Wilmington and Baltimore.	91.80	20,000 00
Bay View to Quantico	Baltimore and Potomac	72.80	21,900 00
Quantico to Richmond.....	Richmond, Fredericksburgh and Potomac.	81.50	17,419 75
Richmond to Petersburg	Richmond and Petersburg.....	23.30	4,208 67
Petersburgh to Weldon.....	Petersburgh	64.00	11,620 00
Weldon to Wilmington	Wilmington and Weldon.....	102.07	22,377 77
Wilmington to Florence	Wilmington, Columbia and Augusta ..	110.00	20,075 00
Florence to Charleston Junction.....	Northeastern Railroad of South Carolina.	95.00	17,337 50
Charleston Junction to Savannah.....	Charleston and Savannah	108.00	19,710 00
Savannah to Jacksonville.....	Savannah, Florida and Western.....	171.50	31,290 75
Baltimore to Hagerstown.....	Western Maryland.....	86.00	15,804 50
Jacksonville to Tampa	Jacksonville, Tampa and Key West, and South Florida.	242.57	32,281 49
Total .....	.....	.....	291,000 00

This is an increase of \$39,281.49 over the cost of this service for the last fiscal year, and this increased amount was appropriated for the purpose of expediting the mails over the line of the Jacksonville, Tampa and Key West Railroad from Jacksonville to Sanford, and over the South Florida Railroad from Sanford to Tampa; thus furnishing increased facilities to and from all points in Florida, and better communication between the United States and Cuba. The amount appropriated for this purpose, namely, \$39,281.49, would not admit of the payment of the regular rate during the entire year, but, inasmuch as the service did not commence until August 8, 1886, there will be an unexpended balance at the close of the current year. In estimating for the next fiscal year I have figured this service from Jacksonville to Tampa at the regular rate, which will amount to \$44,269.02, and make the total amount needed for necessary and special facilities on trunk lines, \$295,937.53, which I have the honor to recommend be appropriated for this purpose for the fiscal year ending June 30, 1888. In reference to this estimate, I would state that annually since 1878 Congress has made special appropriations to enable the Department to obtain, from railroad companies, special facilities for the transportation of the mails, which could not be obtained otherwise than by the expenditure of the fund asked for. That these appropriations have been properly used to secure the best results attainable in connection with the fast-mail service, the tables of the expenditures published by this office in its annual reports, together with the debates in Congress in reference to the matter, will fully attest.

The advantages secured to the people of all sections by the fast-mail service are important, especially so to those engaged in mercantile pursuits in the commercial centers, to whom speedy and frequent service between the different sections of the country has become a matter of absolute necessity. This appropriation will simply enable the Department to maintain the service on its present basis and close the gap between Jacksonville and Tampa by means of the connecting lines of railroad mentioned in the preceding statement. The benefits derived from the special-facilities appropriation are so well understood that any

special plea on my part in favor of the continuance of the appropriation would seem to be unnecessary, but suffice it to say that without the appropriation it would be impossible to satisfactorily continue this service.

ESTIMATES FOR RAILWAY POSTAL CARS.

The amount appropriated for the current fiscal year for railway post-office cars is \$1,808,000. This does not include the cost of this service on subsidized lines, for which credit must be given, and which I am informed by the Auditor of the Treasury for the Post-Office Department amounted to \$116,793 for the fiscal year ended June 30, 1886. This added to the amount appropriated for the current fiscal year would make the cost for railway post-office cars \$1,924,793.

I have estimated the increase for the coming year at 7 per cent. on the appropriation for the current year, exclusive of the subsidized lines, or \$126,560, making a total of \$1,934,560.

The demands for larger cars and increased facilities come from all sections of the country, and these demands must be met as fast as it is ascertained that they are meritorious, or the service must deteriorate. I have, therefore, the honor to recommend that for the fiscal year ending June 30, 1888, the sum of \$1,934,560 be appropriated for railway post-office cars, and sincerely trust that the full amount of the estimate will be provided, as I am clearly of the opinion that it is no more than will be absolutely needed.

EXPLANATION OF ESTIMATE FOR THE PAY OF RAILWAY POSTAL CLERKS.

On June 30, 1886, there were 4,573 railway postal clerks in the service, whose aggregate annual salaries amounted to \$4,567,645. The average annual salary per clerk was \$998.82. The following table exhibits the expenditures on account of employes of the Railway Mail Service (railway postal clerks) from 1877 to 1886, together with the amount of appropriation for 1887 and estimate for the same for 1888:

Fiscal year ending June 30—	Railway postal clerks in service.	Increase.	Expenditures.	Increase over preced- ing year.	Per cent. of increase over preceding year.	Increase of railroad route.
						<i>Miles.</i>
1877.....	2,500	.....	\$2,436,547 58	.....	.....	.....
1878.....	2,608	108	2,496,663 82	\$60,116 24	2.46	2,574
1879.....	2,609	1	2,666,315 65	169,651 83	6.79	2,871
1880.....	2,946	237	2,778,645 47	112,329 82	4.21	5,829
1881.....	3,177	231	3,039,113 97	260,468 50	9.37	6,249
1882.....	3,570	393	3,235,853 12	196,739 15	6.47	8,994
1883.....	3,855	285	3,688,032 78	452,179 66	13.97	9,264
1884.....	3,963	108	3,972,071 60	284,038 82	7.70	6,952
1885.....	4,387	424	4,246,209 51	274,137 91	6.90	3,873
1886.....	4,573	184	4,516,825 54	236,707 54	5.53	2,887
1887.....	.....	.....	*4,800,000 00	283,174 46	6.27	.....
1888.....	.....	.....	†4,990,240 62	190,240 62	3.96	.....

*** Appropriation.**

† Estimate.

The cost of the service for the fiscal year ended June 30, 1886, was.....	\$4, 516, 825 54
Add amount of increase in expenditures 1886 over 1885	236, 707 54

Gives estimated amount required for 1887	4, 753, 533 08
Add for increase same amount as before.....	236, 707 54

Gives estimated amount required for 1888 4,990,210 \$2

While this estimate exceeds the current appropriation by but \$190,240.62, or 3.96 per cent., I am of the opinion that it will be sufficient to meet all the demands of the service, without in any way impairing its efficiency. I have, therefore, the honor to recommend that for the fiscal year ending June 30, 1888, the sum of \$4,990,240.62 be appropriated for the payment of salaries of railway postal clerks.

FAST MAILS.

Since the date of my last annual report several changes have been made in the fast-mail service which, while apparently slight in themselves, are important in their effects. This is particularly the case on the Pennsylvania Railroad between New York, N. Y., and Saint Louis, Mo.

In the summer of 1885 the press of Saint Louis, in the interest of the commercial community of that city and section of country, took occasion frequently to refer to the service between New York and Saint Louis, claiming that it was totally inadequate to meet the demand and insufficient to promote and protect the business relationship existing between these important points. From the numerous complaints received by the Department in reference to this slow service, it was evident that the comments made by the press were fully indorsed by the representative business men of that city, and action was accordingly taken in the matter.

The demand of the people of Saint Louis was for an earlier arrival (in the morning) of the afternoon mails from New York, and a similar earlier arrival (at New York in the forenoon) of the afternoon mails from Saint Louis—the former in time for the first carrier delivery at Saint Louis, and the latter to insure arrival before the close of the commercial exchanges and banks on the day of receipt.

On July 14, 1885, this matter was brought to the attention of the Pennsylvania Railroad by this office, and an urgent request for improved facilities, between the points above mentioned, was made. The schedule at this time was:

Leave New York.....	7.45 p. m.
Arrive Saint Louis.....	7.00 a. m., second morning.
Leave Saint Louis.....	7.30 p. m.
Arrive Philadelphia	8.25 a. m., second day.
Arrive New York	11.22 a. m., second day.

The Pennsylvania Company, while indicating a disposition to assist the Department in improving the facilities on its lines, intimated that the demand would involve a radical change in the manner of running the principal trains between New York and Saint Louis, and that the business and passenger interests of the company would hardly admit of a compliance therewith. After considerable correspondence had been exchanged between the company and this office, a very gratifying result was reached on November 30, 1885, when a change of schedule was issued by the Vandalia Railroad, so as to enable trains to leave New York on the old schedule, 7.45 p. m., and arrive at Saint Louis at 5.45 second morning, instead of 7 o'clock. This change not only furnished the Saint Louis business community with their New York mail for the first carrier delivery, but rendered the connections at Saint Louis of this important mail for the Southwest absolutely certain. From that time not a word of complaint has reached this office.

Having accomplished the desired improvement for mail arriving at

Saint Louis from the East, the improvement in the opposite direction was again brought to the attention of the company as urgently as consistent with official propriety. The schedule from Saint Louis to New York at this time was, as above stated:

Leave Saint Louis.....	7.30 p. m.
Arrive Philadelphia	8.25 a. m., second morning.
Arrive New York.....	11.22 a. m., second morning.

Or 39 hours and 52 minutes in transit between Saint Louis and New York, reaching Philadelphia for a noon delivery and New York for an afternoon delivery, and too late to be available at the clearing-house until next day.

Taking effect December 7, 1885, the Pennsylvania Company agreed to place the postal cars on their fast train (No. 6), leaving Pittsburgh at 7.15 p. m., due at Philadelphia at 5.55 a. m., and at New York at 8.28 a. m. By this change the first carrier delivery was secured at Philadelphia and an early morning delivery at New York, arriving at the latter point in ample time for "change," day of receipt. This change, also, secured all the connections in the early morning at Philadelphia, none of which were made before, and connected at New York with the Boston, Springfield, and New York railway post-office, 9.01 a. m., for all New England, and the 10.30 a. m. express on the New York Central and Hudson River Railroad. Neither of these important connections were possible under the old schedule arriving at New York at 11.22 a. m. The schedule of arrival at New York has been somewhat further improved by having the schedule of train No. 6 quickened, so as to reach Philadelphia at 5 a. m. and New York at 7.23 a. m. This is the present schedule.

The important facilities thus secured between, and particularly affecting, the business interests of Saint Louis, Philadelphia, and New York, I consider the most important of the present fiscal year.

In connection with the subject of improved facilities between New York and Saint Louis, it is proper to invite your attention to the fact that a very urgent demand has been made by the commercial community of Pittsburgh, Pa., for a better service between New York and Pittsburgh. In March last this subject was presented by the Chamber of Commerce at Pittsburgh, and, on the 16th of the same month, a conference was had at Pittsburgh between a representative of this service, the postmaster at Pittsburgh, and a committee of the Chamber of Commerce, in which there was quite a lengthy discussion in reference to the mail service to Pittsburgh from the east, in connection with a claim, on the part of the commercial body represented, that this service was capable of much improvement. The committee suggested that a mail leaving New York City at a later hour in the evening than at present, and reaching Pittsburgh at an early hour in the morning, be provided. The fact was pointed out to the committee that they were, at that time, receiving a mail from New York, leaving that city at 6 p. m., and arriving at Pittsburgh at 7.15 a. m.

They claimed, in response to this, that, although the mail from New York by train 9, as above mentioned, was an exceedingly valuable accommodation, it was deficient, in the fact that it did not bring the mail from New York City later than 5 o'clock. This is true, as one hour is required between the closing of the mail at the New York post-office and the departure of the trains from the Pennsylvania depot. The committee further said that much mail is received in the New York office for Pittsburgh after 5 p. m., which does not reach Pittsburgh

until 9.35 a. m., and is not delivered until about an hour later—10.35 a. m.; that letters mailed in New York for Pittsburgh at 6.30 p. m. did not reach them until the afternoon following.

It was explained to these gentlemen that the Post-Office Department was making use of all the trains provided by the railroad company, and that the Department had recognized the fact that better facilities should exist between these points, and had made numerous efforts to induce the company to furnish better facilities; but, while the company had treated these representations from the Department with great courtesy, it had always contended that there were obstacles which prevented its acquiescence, and no satisfactory result has, as yet, been reached. Thus it will be seen that, while this Department has been most gratifyingly successful in its efforts for an improvement of facilities between Saint Louis and New York, and *vice versa*, it has thus far been found impossible to afford any improved facilities for the mails from New York to Pittsburgh. However, I do not despair of being able, in the near future, to accomplish some result that will prove decidedly advantageous to the people of Pittsburgh and early morning connections from that point.

No change of importance has occurred to the transcontinental fast mails via Omaha, Nebr., and Saint Paul, Minn., the schedules remaining about as stated in my last annual report, excepting the arrival at Chicago at 12.45 a. m., instead of 12.35 a. m., a mere matter of ten minutes, having no effect. A very decided improvement, however, in the facilities from Chicago for the Northwest (Dakota, Minnesota, and Wisconsin), has been secured to the Department by the establishment of limited express trains between Chicago, Ill., and Saint Paul, and Minneapolis, Minn., over the lines of the Chicago and Northwestern, and the Chicago, Milwaukee and Saint Paul Railroads, commencing May 3, 1886:

Leaving Chicago at.....	7.30 p. m.
And arriving at Saint Paul at	7.55 a. m.
These limited trains furnish the Department with the.....	7.30 p. m.

dispatch from Chicago, arriving at Saint Paul early the following morning.

Previous to May 3, 1886, all mails reaching Chicago in the p. m. were held for the "fast mail," Chicago and Minneapolis railway post-office:

Leaving Chicago at	3.00 a. m.
Arriving at Milwaukee at	5.30 a. m.
Saint Paul at	3.25 p. m.
Minneapolis at	4.00 p. m.

Now, however, all mails arriving in time for the limited trains are dispatched at 7.30 p. m., to the Chicago and Minneapolis railway post-office, west of Milwaukee, Wis., at which latter point the railway post-office car leaving Chicago at 11.30 a. m. is picked up and carried to Minneapolis by the limited train, arriving at Saint Paul in time to connect the early departing railway post-offices. None of these railway post-offices could receive the p. m. mails from Chicago previous to the establishment of the limited trains; and I am pleased to acknowledge the courtesy extended the Department by the officials of this company for the running of the postal cars on these limited trains as far as seemed to me necessary for the public interest.

The only other change of importance is the recent extension of the "fast mail" via the Atlantic Coast Line, from Jacksonville to Tampa, Fla., 241.54 miles. This makes continuous "fast-mail" railway post-

office service from New York to Tampa, Fla., covering a distance of 1,326.62 miles. While the extension of "fast-mail" facilities to Tampa, Fla., became necessary in connection with the recently improved service between the United States and Cuba, it has, also, become of great importance to the business interests of the whole State of Florida, and the service has proven very satisfactory and beneficial to the patrons of the Department in that rapidly growing section of the country.

I am, sir, very respectfully, your obedient servant,

JOHN JAMESON,
General Superintendent.

Hon. A. LEO KNOTT,
Second Assistant Postmaster-General.

REPORT OF THE THIRD ASSISTANT POSTMASTER-GENERAL.

POST-OFFICE DEPARTMENT,
OFFICE OF THIRD ASSISTANT POSTMASTER-GENERAL,
Washington, D. C., November 6, 1886.

SIR: I have the honor to submit the following report of the operations pertaining to this office for the fiscal year ended June 30, 1886, premising with a reference to the tabular statements and other papers hereto annexed and forming a part of the same, viz:

No. 1. Explanation of estimates of appropriations for the office of the Third Assistant Postmaster-General for the fiscal year ending June 30, 1888.

No. 2. Statement showing itemized appropriations for the service of the Post-Office Department for the fiscal year ended June 30, 1886, and the expenditures made out of the same.

No. 3. Statement exhibiting the receipts and expenditures, under appropriate heads, by quarters, for the fiscal year ended June 30, 1886, compared with the receipts and expenditures of the fiscal years ended June 30, 1884, and June 30, 1885.

No. 4. Statement showing receipts and disbursements at Treasury depositories during the fiscal year ended June 30, 1886.

No. 5. Statement showing the issue in detail of all the several kinds of adhesive postage-stamps, stamped envelopes, newspaper wrappers, and postal cards, for the fiscal year ended June 30, 1886.

No. 6. Statement showing the issues of postage-stamps, stamped-envelopes, newspaper wrappers, and postal cards, by denominations, for the fiscal year ended June 30, 1886.

No. 7. Statement showing the increase in the issues of postage-stamps, stamped envelopes, newspaper wrappers, and postal cards for the year ended June 30, 1886, as compared to those of the previous year.

No. 8. Statement showing the number of registered letters and parcels transmitted through the mails from each of the several States and Territories in the United States during the fiscal year ended June 30, 1886.

No. 9. Statement showing the increase of registered letters and parcels upon which fees were collected at twenty-five of the leading cities during the fiscal year ended June 30, 1886, over the number registered during the preceding year.

No. 10. Statement showing the operations of the registry system at the cities of New York, Philadelphia, Chicago, Saint Louis, and Washington during the fiscal year ended June 30, 1886.

No. 11. Statement showing the number of pieces of dead mail matter treated in the Division of Dead Letters during the fiscal year ended June 30, 1886.

No. 12. Statement showing the disposition of mail matter opened in the Division of Dead Letters during the fiscal year ended June 30, 1886.

No. 13. Statement showing the number of pieces, classification, and disposition of unmailable matter received at the Dead-Letter Office during the fiscal year ended June 30, 1886.

- No. 14. Statement showing the number of pieces of dead matter of foreign origin received and disposed of during the fiscal year ended June 30, 1886.
- No. 15. Statement showing the number of letters originating in the United States and returned by foreign countries as undeliverable during the fiscal year ended June 30, 1886.
- No. 16. Statement showing the number of pieces of dead mail matter returned to and received from foreign countries during the fiscal year ended June 30, 1886.
- No. 17. Statement showing the number, classification, and disposition of dead registered letters during the fiscal year ended June 30, 1886.
- No. 18. Record of the number and weight of letters, parcels, and circulars mailed during the six days from June 21 to June 26, 1886, inclusive, at twenty of the leading post-offices.
- No. 19. Record of the number and weight of letters, parcels, and circulars mailed during the six days from September 20 to September 25, 1886, inclusive, at twenty of the leading post-offices.
- No. 20. Statement showing the operations of the special-delivery system during the year ended September 30, 1886.
- No. 21. Copy of contract for stamped envelopes and newspaper wrappers for the four years beginning October 1, 1886.

FINANCIAL EXHIBITS OF POSTAL SERVICE.

The financial exhibits of the last fiscal year, so far as they relate to the expenditures, are in small part necessarily subject to estimation, it being impracticable to discharge all the obligations of the year so soon after its close. The liabilities are, however, closely approximated upon the best information available at this time, and as compared to the expenditures they are small in amount. By law all balances of appropriations remaining unexpended at the close of the fiscal year for which the appropriations are made are available, in the discharge of the obligations of the year, for two years from the date of the last appropriation made by law. Disbursements were accordingly made during the last fiscal year not only on account of that year, but of the two prior years. The appropriations for the year ended June 30, 1884, being no longer available, it may be well to make a final statement of the account for that year before proceeding to give the exhibits for the year just closed. For the purposes of comparison it may be well, also, to restate the account for the year ended June 30, 1885, as modified by the disbursements made since the report for that year was rendered.

The exhibits are as follows:

FISCAL YEAR ENDED JUNE 30, 1884.

REVENUE.

1. Ordinary postal revenue.....	\$42,818,635 00
2. Revenue from money-order business (as finally ascertained, the report of the Postmaster-General having been in error in stating it at \$519,492.08 upon advanced figures furnished by the Auditor)	507,323 81
Gross receipts.....	\$43,325,958 81.
Less amount charged to bad debts.....	8,455 83
Net revenue	43,317,502 98

EXPENDITURES AND LIABILITIES.

Expenditures:	
From July 1, 1883, to September 30, 1884.....	46,404,950 65
From October 1, 1884, to September 30, 1885	479,491 30
From October 1, 1885, to September 30, 1886	178,171 61
	<u>47,062,623 56</u>

Liabilities:

Amount of outstanding liabilities for various ob- jects on account of the year.....	\$3,500 75	
Amount payable to Pacific railroads, under de- cision of the Supreme Court.....	193,800 73	
	<u>197,301 48</u>	\$47,259,925 04
Deficiency in revenue		3,942,422 06

COST OF POSTAL SERVICE.

Amount of expenditures and liabilities as above.....		47,259,925 04
Amount certified to Secretary of the Treasury for credit to Pacific railroads, from July 1, 1883, to September 30, 1884.....	1,260,179 51	
From October 1, 1884, to September 30, 1885.....	283,238 09	
	<u>1,543,417 60</u>	
Less amount erroneously certified, as appears by decis- ion of the Supreme Court, and transferred to out- standing liabilities as above.....	193,800 73	
		<u>1,349,616 87</u>
Total cost of service.....		48,609,541 91
Excess of total cost of postal service over revenue.....		5,292,038 93

The net receipts were \$3,942,422.06, or 8.3 per cent., less than the expenditures and outstanding liabilities, and \$5,292,038.93, or 10.8 per cent., less than the total cost of the postal service, inclusive of the amount certified to the Secretary of the Treasury for mail transportation on the Pacific railroads. As compared to the previous year, there was a decrease of \$2,152,386.81, or 4.7 per cent., in the net revenue (excluding amounts charged to bad debts in both years), and an increase of \$3,700,175.82, or 8.4 per cent., in the expenditures and liabilities, and of \$4,172,885.29, or 9.3 per cent., in the total cost of the service.

FISCAL YEAR ENDED JUNE 30, 1885.

REVENUE.

1. Ordinary postal revenue	\$42,151,910 53
2. Receipts from money-order business.....	408,933 30
Gross revenue.....	<u>42,560,843 83</u>

EXPENDITURES AND LIABILITIES.

Expenditures:

From July 1, 1884, to September 30, 1885.....	\$49,317,188 41
From October 1, 1885, to September 30, 1886	189,149 15
	<u>49,506,337 56</u>

Liabilities:

Amount of outstanding liabilities for various ob- jects on account of the year	1,964 53	
Amount payable to Pacific railroads under decis- ion of the Supreme Court	247,830 44	
	<u>249,794 97</u>	49,756,132 53
Deficiency in revenue		<u>7,195,288 70</u>

COST OF POSTAL SERVICE.

Amount of expenditures and liabilities, as above.....	\$49,756,132 53
Obligations certified to Secretary of the Treasury for credit to Pacific railroads from July 1, 1884, to September 30, 1885	\$1,340,226 83
From October 1, 1885, to September 30, 1886	3,920 61
Total amount certified.....	1,344,207 44
Less amount erroneously certified, as appears by decision of the Supreme Court, and transferred to outstanding liabilities, as above	247,830 44
	<u>1,096,377 00</u>
Total cost of service.....	50,852,509 53
Excess of total cost of the postal service over revenue.....	<u>8,291,665 70</u>

The receipts were \$7,195,288.70, or 14.4 per cent., less than the expenditures and outstanding liabilities, and \$8,291,665.70, or 16.3 per cent., less than the total cost of the postal service, inclusive of the amount certified to the Secretary of the Treasury for mail transportation on the Pacific railroads. As compared to the previous fiscal year, there was a decrease of \$756,659.15, or 1.7 per cent., in the net receipts, and an increase of \$2,496,207.49, or 5.2 per cent., in the expenditures and liabilities, and an increase also of \$2,242,967.62, or 4.6 per cent., in the estimated total cost of the service.

FISCAL YEAR ENDED JUNE 30, 1886.

REVENUE.

Ordinary postal revenue:	
1. Ordinary revenue, less amount collected on second-class matter.....	\$42,498,245 19
2. Revenue on second-class matter	1,099,625 89
	<u>43,597,871 08</u>
Revenue from money-order business.....	350,551 87
	<u>43,948,422 95</u>
Total gross receipts	43,948,422 95
Deduct amount charged to bad debts.....	12,174 25
	<u>43,936,248 70</u>

EXPENDITURES, LIABILITIES, ETC.

Expenditures:	
Amount expended to September 30, 1886, on account of the year ended June 30, 1886.....	\$50,627,553 37
Liabilities:	
Amount of indebtedness for various objects certified to Auditor and not yet reported for payment	\$24,612 84
Estimated amount of indebtedness not yet reported to Auditor.....	175,000 00
Amount due for transportation on Pacific railroads, for which no appropriation was made..	251,101 61
	<u>450,714 45</u>
Total actual and estimated expenditures for the service of the year.....	<u>51,078,267 82</u>
Deficiency of revenue:	
Estimated amount of deficiency of revenue to be supplied out of the general Treasury on account of the service of the year....	<u>7,142,019 13</u>

COST OF POSTAL SERVICE.

Total of actual and estimated expenditures, as shown above.....	\$51,078,267 82
Amount certified to Secretary of the Treasury by the Auditor for transportation of the mails on the Pacific railroads, and by law not charged to the appropriations for the postal service.....	1,112,138 40
Total estimated cost of the postal service for the year.....	52,190,406 22
Deduct amount of net revenue, as shown above	43,936,248 70
Leaves excess of estimated cost of service over amount of net revenue.	8,254,157 52

In addition to the \$50,627,553.37 expended as above, the sum of \$377,190.43 was paid on account of the service of previous years, making the total amount disbursed during the year \$51,004,743.80. Of the disbursements on account of previous years \$189,149.15 was for 1885; \$178,171.61 was for 1884; \$8,974.59 was for 1883 and for prior years; \$770.40 was for 1881 and for prior years; and \$124.68 was for compensation of postmasters readjusted under the act of March 3, 1883.

The receipts of the last fiscal year were \$6,679,130.42, or 13.1 per cent., less than the disbursements on account of the year; \$7,129,844.67, or 13.9 per cent., less than the disbursements and estimated outstanding liabilities; and \$8,241,983.27, or 15.7 per cent., less than the total estimated cost of the postal service, inclusive of transportation on the Pacific railroads.

The total amount of expenditure authorized by the original postal-service appropriation act was \$53,700,990, covering thirty-six specified objects. An additional appropriation of \$415,000 was subsequently made for inland mail transportation by railroad.

No specific amount was appropriated for the compensation of messengers under the special-delivery system, the act of Congress authorizing the system providing in general terms for the allowance of fees on the letters received and recorded for special delivery.

The amount allowed under this head from October 1 to June 30 was \$67,652.14, and this sum should be included in the total of authorized expenditures, which thus amounted to \$54,183,642.14.

In one item only did the expenditure exceed the appropriation, and that was for ship, steamboat, and way letters. The appropriation was \$2,000 and the expenditure was \$2,050.83, leaving a deficiency of \$50.83 to be provided for. In this case the expenditure is regulated by law, and is not subject to the control of the Department. In thirty-five items of appropriation there were unexpended balances amounting to \$3,556,139.60, which are still available for the service of the year. The net excess of the appropriations over the expenditures was, therefore, \$3,556,088.77. Deducting from this amount that of the estimated outstanding liabilities (\$450,714.45) would leave the appropriations \$3,105,374.32, or 5.7 per cent., in excess of the total expenditures, actual and estimated.

The actual and estimated expenditures of the last fiscal year are \$1,322,135.29, or 2.5 per cent., over those of the previous fiscal year.

The total estimated cost of the postal service, inclusive of the amount certified on account of mail transportation on the Pacific railroads, is \$1,337,896.69, or 2.6 per cent., over the total cost of the previous year. The net revenue of the last fiscal year was \$1,375,404.87, or 3.2 per cent., more than that of the previous year. The increase of revenue was, therefore, \$37,508.18 more than the estimated increase in the cost of the service. The revenue will be shown more in detail hereafter.

As compared to the year ended June 30, 1884, the year ended June 30, 1886, exhibited an increase of \$622,464.14, or 1.4 per cent., in the

postal receipts ; of \$3,818,342.78, or 8 per cent., in the expenditures and estimated outstanding liabilities; and of \$2,468,725.91, or 5 per cent., in the estimated total cost of the postal service.

SUSPENSE ACCOUNTS AND BAD DEBTS.

From the report of the Auditor it will appear that the sums involved by "bad debts" and "suspense accounts" closed during the last fiscal year were as follows, viz :

Amount of balances due from late postmasters and charged to bad debts and compromise accounts	\$12,656 02
Amount due to late postmasters and closed by suspense	481 77
Net loss	12,174 25

The amount of the net loss is chargeable to the revenue of the fiscal year in which the accounts are closed, without reference to the periods when the losses actually accrued.

AMOUNTS DRAWN FROM THE TREASURY.

The following amounts were drawn from the general Treasury, within the last fiscal year, on account of special and deficiency appropriations, viz :

For deficiency in the postal revenues for the year ended June 30, 1883, under act approved May 4, 1882, Stats., vol. 22, chap. 116, page 55.	\$520,770 00
For deficiency in the postal revenues for the year ended June 30, 1884, under act approved March 3, 1883, Stats., vol. 22, chap. 92, page 455.	528,098 81
For deficiency in the postal revenues for the year ended June 30, 1885, under act approved July 5, 1884, Stats., vol. 23, chap. 234, page 157.	3,165,553 21
For deficiency in the postal revenues for the year ended June 30, 1886, under act approved March 3, 1885, Stats., vol. 23, chap. 342, page 387.	4,500,000 00
Total drawn during the year	8,714,422 02

The amount appearing in the report of the Auditor as drawn from the Treasury, is \$8,751,070.73; but these figures represent the amounts drawn from October 1, 1885, to September 30, 1886, while the foregoing was the sum actually drawn within the fiscal year proper.

TRANSACTIONS AT TREASURY DEPOSITORIES.

The receipts and disbursements at Treasury depositories during the past fiscal year may be briefly stated as follows :

Balance subject to draft July 1, 1885	\$3,036,935 41
Outstanding warrants June 30, 1885	78,937 40
Deposits :	
On account of postal revenues	\$17,879,463 62
On account of grants from the general Treasury.	8,714,422 02
	26,593,885 64
	29,709,753 45
Deduct deposit made in quarter ended June 30, 1885, and counter- entered in quarter ended September 30, 1885	22 70
	29,709,735 75
Amount of warrants paid during the year ended June 30, 1886	24,279,336 10
	5,430,399 65
Balance at depositories June 30, 1886	106,415 99
Amount of warrants outstanding June 30, 1886	
Balance subject to draft June 30, 1886	5,321,983 66

The balance on hand at the Treasury depositories subject to draft on the 30th June, 1886, was \$2,285,048.25 in excess of the amount on hand on the 30th June, 1885.

Of the \$17,879,463.62 of postal revenue, \$74,214.39 was deposited through national-bank depositories.

The balance on hand on June 30, 1885, in national-bank depositories was \$45,138.04, and on June 30, 1886, it was \$2,062.61, a decrease of \$43,075.43.

The number of warrants drawn upon the Treasurer of the United States and assistant treasurers during the year was 72,999, comprehending payments to the amount of \$24,308,814.69.

Accounts were kept with the Treasurer, nine assistant treasurers, and forty-one designated national-bank depositories.

REVENUE FOR 1886.

The last fiscal year marked a favorable turn in the tide of the postal receipts, which had been receding for the two previous years.

The period from 1879 to 1882 was an unprecedently prosperous one for the postal revenue. The average annual rate of increase of ordinary revenue for the three years was nearly 12 per cent., as against an annual average of only a little more than 5 per cent. for the nine years preceding 1879. A depression of the business interests of the country had, however, set in, and the year ended June 30, 1883, exhibited an increase of only 8.6 per cent. in the postal receipts. The gross receipts for that year amounted to \$45,508,692.61, and this was the greatest amount ever realized in any one year of the history of the postal service. It was an increase of \$15,466,709.75, or 51.4 per cent., over the receipts of the year ended June 30, 1879.

A still more important factor than the unfavorable condition of business intervened to curtail the volume of the postal receipts.

On October 1, 1883, the rate of postage on first-class matter was reduced from 3 cents to 2 cents for each half-ounce or fraction thereof. This was a large reduction, and it affected by far the greatest of all the sources of the postal revenue. An immediate falling off in amount was only a natural result, though partial compensation was to be expected from the stimulus to an increase of business afforded by a cheaper rate of postage, and the tendency to a substitution of sealed inclosures at letter rates for printed matter and postal cards.

The gross revenue exhibited for the year ended June 30, 1884, was \$43,325,958.81. This was \$2,182,733.80, or 4.7 per cent., less than the revenue of the previous year. The new rate of postage had now been in effect for nine months, and under ordinary circumstances the succeeding year should have shown a handsome increase.

In actual results, however, the gross receipts for the year ended June 30, 1885, were \$765,114.98, or 1.7 per cent., less than those of 1884, and \$2,947,848.78, or 6.4 per cent., less than those of 1883. This fact sufficiently attested the extreme severity of the depression in business which prevailed during the year 1884-'85.

The six months ended December 31, 1884, showed a decrease of \$1,060,070.33, or 4.8 per cent., and the six months ended June 30, 1885, an increase of \$294,955.35, as compared to corresponding periods of the previous fiscal year. It was apparent that a reaction had set in; but still the situation on the 1st of July, 1885, was not such as to promise an increase of revenue for the year then begun. There were some prospects of an improvement in the general business of the country;

but they were not sufficiently pronounced at that time to justify confident hopes of the immediate future. Moreover, two important changes in postal legislation, injuriously affecting the postal revenue, went into effect on the 1st of July, 1885. These were, first, a reduction in the rate of postage on second-class matter from 2 cents to 1 cent per pound, and second, an increase of the unit of weight of first-class matter from half an ounce to a full ounce. It was estimated that these two changes would result in a loss of nearly two million dollars for the first year; and the chances of offsetting this loss, and of making a better showing of revenue for the year ended June 30, 1886, than that of the previous year, were left to depend upon very decided improvement in the business of the country. Fortunately all the signs during the late summer and the autumn of 1885 pointed strongly to an early return of national prosperity. It was in the light of these indications that it became necessary in November last, in connection with the preparation of the annual report, to submit estimates of the postal revenue for the current and the last fiscal years. The work was attended by more than the usual degree of uncertainty as to results. It was possible to approximate somewhat closely the revenue to be expected from second-class matter, notwithstanding the doubt as to how far the reduction in the rate of postage would lead to an increase in the volume of matter committed to the mails. In the estimate for 1886 allowance was made for an increase of 8 per cent. in weight of matter over that mailed during the previous year. The amount called for by the estimate was \$1,091,426 as against \$2,021,159.26 collected during the preceding year. The increase of weight contemplated by the estimate was less than a normal one, the average rate of increase for the six preceding years having been a little more than 12 per cent.

The effects of the increase of the unit of weight of first-class matter were largely a matter of speculation. It was estimated, upon such statistics as were available, that between 4 and 5 per cent. of all the letters mailed were in excess of half an ounce in weight; and it was in these that a loss was to be suffered by the increase of the unit to one ounce. By way of compensation the new unit offered an inducement to the inclosure under seal, at letter rates, of circulars and parcels of merchandise previously sent at third and fourth class rates of postage; but the gain in this direction would naturally be gradual in its progress, and for a time at least it was not likely to overcome the loss on letters weighing more than half an ounce. The net loss for the first year of the change was roughly estimated upon the best available data at \$800,000.

The only new source of revenue was through the special-delivery system established to take effect on October 1, 1885, but the gain from this source was not expected to constitute a considerable factor in the revenue of the year.

But, after all, the greatest element of uncertainty was in the future of the business condition of the country.

With the purpose of measuring the indications in the light of experience, a review was made of the revenue by quarterly and annual periods for a series of years past. The postal service furnished a fair reflex of the general business situation; a separate tracing of the revenue was made as between thirty of the larger and all of the remaining post-offices. The thirty large offices in question included all the great commercial centers of the country, and they collected nearly 40 per cent. of the entire postal receipts.

It appeared from the examination that upon the approach of a period

of commercial depression the larger offices are the first to show a check in the flow of the receipts; that they suffer at a disproportionate rate while the depression continues; and that they are the first to give evidence of a return to prosperity by an augmentation of the revenue. The smaller offices, while slower to feel the effects of a change, either for better or worse, in the situation of business, show a greater increase of revenue than the larger offices in the midst of a period of national prosperity.

As already seen, there has been a gain of 1.3 per cent. for the six months ended June 30, 1885, as compared to the corresponding six months of the previous year; and this was the latest information available from all the post-offices, the returns for the quarter ended September 30 being still in process of adjustment by the Auditor. Special returns were, however, obtained from the thirty principal offices for the four months from July 1 to October 31. These returns showed an increase of about 4 per cent. for the quarter ended September 30, and of about 10 per cent. for the month of October, as compared to the corresponding periods of the previous year. The receipts from second-class matter were excluded from the computation, but the increase was in spite of any losses that may have resulted from the change of the unit of weight of first-class matter. The returns, and particularly those for the month of October, were indicative of a great improvement in business, the same offices having shown a gain of less than one-half of one per cent. for the quarter ended March 31, and of less than 4 per cent. for the quarter ended June 30.

In the expectation of a still further improvement, the ordinary revenue, exclusive of the receipts from second-class matter, for the year ending June 30, 1886, was estimated at an increase of 6 per cent. on the revenue derived from the same sources during the previous fiscal year. The amount of the estimate was \$42,538,596.34, and it contemplated an increase of \$2,407,845.07, in face of an anticipated loss of \$800,000 from the change of the unit of weight. It was equivalent to an increase of 7.9 per cent. on the basis of the half-ounce unit which had prevailed during the previous year.

The estimate appeared to be an extravagant one in the light then afforded; but it was verified with a surprising degree of accuracy, as was also the estimate of the revenue from second-class matter. The receipts from the money-order business were estimated by the Superintendent of the Money-Order System at \$400,000, being a decrease of \$107,323.81, as compared to the revenue of the previous year. The total estimated gross receipts for the year ending June 30, 1886, amounted, therefore, to \$44,030,022.34, consisting of \$1,091,426, from second-class matter; of \$42,538,596.34 of ordinary postal revenue, excluding the receipts from second-class matter, and of \$400,000 from money-order business. In actual results the receipts from second-class matter proved to be \$1,099,625.89, the ordinary postal revenue \$42,498,245.19, and the receipts from money-order business \$350,551.87, making a total of \$43,948,422.95.

The receipts from second-class matter were \$8,199.89 more than the amount at which they had been estimated; the ordinary postal revenue was \$40,351.15 less than the amount at which it had been estimated, and the money-order receipts were \$49,448.13 less than the amount of the estimate. In the two former items the net difference between the estimates and the actual results was only \$32,151.26, or less than a twelfth of 1 per cent. of the total amount involved. The money-order receipts were \$49,448.13 less than the estimate, a part at least of the falling off

having been due to the decrease, made in January last, in the fees on foreign money-orders. In the aggregate the receipts were \$81,599.39 less than the estimates. As compared to the previous year, there was a decrease of \$921,533.37, or 45.5 per cent., in the revenue from second-class matter; an increase of \$2,367,493.92, or 5.8 per cent., in ordinary postal revenue, excluding second-class matter; and a decrease of \$58,381.43, or 14.2 per cent., in money-order receipts.

The net increase in the gross receipts was \$1,387,579.12, or 3.2 per cent.

The following are the sources and the amounts of the revenue collected during the last fiscal year, viz :

1. Letter postage paid in money.....	\$60,004 80
2. Box-rents and branch offices.....	2,018,048 04
3. Fines and penalties	13,472 35
4. Sale of postage-stamps, stamped envelopes, newspaper wrappers, and postal cards	41,447,095 88
5. Amount taken from dead letters for which no owners could be found	8,858 33
6. Revenue from money-order business	350,551 87
7. Miscellaneous	50,391 68
Total.....	43,948,422 95

As compared to the year ended June 30, 1885, there was an increase of \$59,810.99, or 3 per cent., in the receipts from box-rents; of \$1,390,869.19, or 3.4 per cent., in the sale of postage-stamps, stamped envelopes, newspaper wrappers, and postal cards; of \$6,082.58, or 13.7 per cent., in miscellaneous receipts.

There was a decrease of \$7,523.06, or 11.1 per cent., in the amount of letter postage paid in money; of \$39.55, or .02 per cent., in the amount received from fines and penalties; of \$3,239.60, or 26.7 per cent., in the amount taken from dead letters; and of \$58,381.43, or 14.2 per cent., in the revenue from money-order business.

The three items of increase amounted to \$1,456,762.76, and the four items of decrease to \$69,183.64, leaving a net increase of \$1,387,579.12, or 3.2 per cent., as previously shown.

In the foregoing detailed statement of revenue, the sales of postage-stamps include the revenue from second-class matter (payable with stamps of special design), but the amount realized from this latter source is ascertained from special returns made to this office. This amount was accordingly deducted in the computation of ordinary revenue, which, however, includes the receipts from all other sources save that of the money-order business.

A closer analysis of the ordinary receipts of the last fiscal year, and an examination of the influences by which they were affected, will contribute to a better understanding in submitting the estimates for the current and the ensuing fiscal years.

It will be necessary to consider only the ordinary postal revenue, omitting, for obvious reasons, the receipts from second-class matter and from the money-order business.

The ordinary revenue for the year amounted, as already shown, to \$42,498,245.19. Of this amount, \$9,700,463.05, or 22.8 per cent., was collected during the quarter ended September 30, 1885; \$10,994,326.16, or 25.99 per cent., during the quarter ended December 31, 1885; \$11,179,047.72, or 26.3 per cent., during the quarter ended March 31, 1886; and \$10,624,408.26, or 25 per cent., during the quarter ended June 30, 1886.

As compared to the corresponding periods of the previous year there was an increase of \$185,056.11, or 1.9 per cent., for the quarter ended

September 30, 1885; of \$798,623.68, or 7.8 per cent., for the quarter ended December 31, 1885; of \$704,731.51, or 6.6 per cent., for the quarter ended March 31, 1886; and of \$679,082.62, or 6.8 per cent., for the quarter ended June 30, 1886.

Following the line of comparisons in the review of last year, to which reference has been made, out of the total of \$42,498,245.19 of ordinary revenue, \$16,153,174.80, or 38 per cent., was collected at thirty of the principal post-offices, and \$26,345,070.39, or 62 per cent., at the remaining offices. At the thirty principal offices \$3,646,009.94, or 22.6 per cent., was collected during the quarter ended September 30, 1885; \$4,293,049.92, or 26.5 per cent., during the quarter ended December 31, 1885; \$4,191,191.73, or 25.9 per cent., during the quarter ended March 31, 1886; and \$4,022,923.21, or 24.9 per cent., during the quarter ended June 30, 1886. At the remaining offices \$6,054,453.11, or 22.9 per cent., of the total of \$26,345,070.39, was collected during the quarter ended September 30, 1885; \$6,701,276.24, or 25.5 per cent., was collected during the quarter ended December 31, 1885; \$6,987,855.99, or 26.5 per cent., during the quarter ended March 31, 1886; and \$6,601,485.05, or 25.1 per cent., during the quarter ended June 30, 1886.

There was an increase for the quarter ended September 30, 1885, of \$152,563.84, or 4.3 per cent., at the thirty principal offices, and of \$32,492.27, or .05 per cent., at the remaining offices; for the quarter ended December 31, 1885, of \$413,925, or 10.6 per cent., at the thirty principal offices, and of \$384,698.68, or 6 percent., at the remaining offices; for the quarter ended March 31, 1886, of \$415,306.48, or 10.9 per cent., at the thirty principal offices, and of \$289,425.03, or 4.3 per cent., at the remaining offices; and for the quarter ended June 30, 1886, of \$281,197.84, or 7.5 per cent., at the thirty principal offices, and of \$397,884.78, or 6.4 per cent., at the remaining offices.

The amounts and rates of increase will be more strikingly exhibited in tabular form, as follows, viz :

Table showing increase, by quarterly periods, in ordinary postal revenue (excluding receipts from second-class matter and from money-order business) for the fiscal year ended June 30, 1886, as compared to corresponding periods of the previous year.

Period.	Increase at thirty large offices.		Increase at remain- ing offices.		Increase at all of- fices	
	Amount.	Per cent.	Amount.	Per cent.	Amount.	Per cent.
Quarter ended September 30, 1885	\$152, 563 84	4. 3	\$32, 492 27	. 05	\$185, 056 11	1. 9
Quarter ended December 31, 1885.....	413, 925 00	10. 6	384, 698 68	6. 0	798, 623 68	7. 8
Quarter ended March 31, 1886.....	415, 306 48	10. 9	289, 425 03	4. 3	704, 731 51	6. 6
Quarter ended June 30, 1886.....	281, 197 84	7. 5	397, 884 78	6. 4	679, 082 62	6. 8
Total for year	1, 262, 993 16	8. 4	1, 104, 500 76	4. 3	2, 367, 493 92	5. 8

It will be observed how correctly the figures represent the different conditions of the business of the country prevailing during the past year.

A revival from the extreme depression of the previous year was fairly in progress before the 1st of October, 1885; and though the increase in the unit of weight of first-class matter had tended to lessen the postal revenue, there was a better showing by nearly 2 per cent. for the quar- ter ended September 30 than for the same quarter of the previous year. The thirty larger offices had responded with an increase of 4.3 per cent.,

and the smaller ones barely escaped a decrease. This was in confirmation of previous experience, the large offices being the first to realize the benefits of a recovery from an era of commercial depression.

The improvement in business continued almost without check until the spring of 1886. The ordinary postal revenue for the six months ended March 31 showed an increase of \$1,503,355.19, or 7.2 per cent., as compared to the corresponding six months of the previous year. The increase at the thirty larger offices was at the rate of 10.8 per cent., and at the remaining offices it was 5.1 per cent. The influences of the better condition of business had been extended beyond the commercial centers, and the gain at the smaller post-offices was a noticeable result.

The labor troubles had now been inaugurated, and they were destined to continue far into the summer of the year. Their effects upon the postal revenue are easily traceable.

At the thirty large offices, which had shown an increase of 10.8 per cent. for the six months ended March 31, there was an increase of only 7.5 per cent. for the quarter ended June 30. The direct connection between cause and effect is emphasized by the fact that the smaller offices, which were not affected by the labor troubles to the same extent as the larger ones, exhibited a better gain for the quarter ended June 30 than for either of the two preceding quarters. In further corroboration, the issue of special-request envelopes (which are used almost exclusively for business purposes) showed an increase of only 11 per cent. for the quarter ended June 30, as against an average quarterly increase of 13.7 per cent. for the six months ended March 31.

It is evident that except for the disturbances caused by the labor question the revenue for the last year would have been very considerably in excess of the estimates. Still the exhibit is a very encouraging one, and it gives promise of a still better future. Notwithstanding that the first quarter of the year showed only a trifling increase, and that the last quarter of the year was affected adversely by the labor troubles, the revenue for the year, as a whole, came out \$1,387,579.12 ahead of that of the previous year; and this in spite of the loss on second-class matter and of the change of the unit of weight of first-class matter. As previously stated, the six months ended March 31 showed an increase in ordinary postal revenue (excluding revenue from second-class matter and money-order business) of \$1,503,355.19, or 7.2 per cent., making no allowance for the loss through the change in the unit of weight. Such an increase cannot be attributed wholly to a natural reaction from the extreme depression of the previous year. It furnishes indisputable evidence of the great improvement that had taken place in the business affairs of the people.

FISCAL YEAR ENDING JUNE 30, 1887.

From what has been said with respect to the past year, there is scarcely a doubt that the current year will realize a still greater improvement in the postal revenue. The labor troubles were settled early in the year; a fair degree of prosperity has attended the business of the country during the past few months, and all the indications at the present time look to its continuance, if not to a still further improvement. None of the sources of the postal revenue have been injuriously affected by changes during the present year. The reduction in the rate of postage on second-class matter and the increase of the unit of weight of first-class matter have been in effect since the 1st July, 1885, and accordingly the revenue will not suffer from these sources in the

comparison of the present with the past fiscal year. On the contrary, the tendency of the ounce unit to encourage the substitution of sealed for unsealed matter, to which reference has been made, will be to increase the revenue for the present year. A count of matter mailed at 20 of the principal post-offices showed an increase for the last week of June, 1886, over the last week of June, 1885, of 59.3 per cent. in the number of wrapped parcels sent under seal at letter rates, as against an increase of 40.6 per cent. in the number of wrapped parcels sent unsealed at third and fourth-class rates of postage. A similar count at the same offices showed an increase for the last week in September of the present over the last week of September of the previous year of nearly 167 per cent. in the number of sealed parcels and 43.3 per cent. in the number of unsealed parcels. The number of sealed parcels mailed at the 20 offices during the last week in September, 1885, was 22,754, and during the last week in September, 1886, it was 60,723. The average weight of the sealed parcels was 3.52 ounces for the last week of September, 1885, and 4.17 ounces for the last week of September, 1886. The total weight of the sealed parcels mailed during the former period was 5,017 pounds, and during the latter period it was 15,839 pounds.

At 2 cents per ounce, the rate charged on sealed matter, the postage on the sealed parcels, making no allowance for fractional weights, would amount to \$1,605.62 for the former period, and \$5,068.52 for the latter period. This was a gain of \$3,462.90, or 215 per cent. for one week at 20 post-offices alone; and while an increase at the same rate throughout the entire year and at all the post-offices is not to be expected, yet it is evident that there will be a considerable augmentation of the revenue from the substitution of sealed for unsealed parcels. As the unsealed parcels outnumbered the sealed parcels more than twenty-eight times in the count for September, 1886, there is a large field in which the substitution of the latter for the former may operate to the advantage of the revenue. The postage on the unsealed parcels (consisting of both third and fourth class matter) mailed in September, 1886, would amount, at third-class rates of postage, to \$34,563.95; at fourth-class rates it would amount to \$69,127.91; and at first-class or sealed rates it would amount to \$138,255.82, making no allowance for fractional units of weights. It is a significant fact also, as serving to show the effects of the increase of the unit of weight of first-class matter, that while the average weight of the sealed parcels increased from 3.52 to 4.17 ounces, the average weight of the unsealed parcels decreased from 4.87 to 4.11 ounces, as between September, 1885, and September, 1886.

The better showing of revenue for the present year to be expected from the change in the unit of weight will not be confined to parcels alone, but it will be favorably influenced to a much greater extent by the substitution of the seal for open circulars and postal cards. The tendencies in this direction will be disclosed in the presentation hereinafter given of the statistics of the count of mail matter, to which reference has been made. The records of the stamp division bear testimony in the same direction. In the issues of stamped envelopes for sealed inclosures there was an increase for the past as compared to the previous fiscal year of 28,979,950, or 11.5 per cent., and in stamped envelopes (ungummed on flap) for unsealed circulars there was a decrease of 12,750, the issue of the latter having numbered 28,862,000 for 1885 and 28,849,250 for 1886. Thus the year's increase in envelopes for sealed inclosures slightly outnumbered the entire issue of the envelopes for open circulars. For the year ended June 30, 1882, prior to the reduction in the letter rate of postage to 2 cents, the ungummed envelopes

for circulars represented 12.5 per cent. of all the stamped envelopes issued ; in 1885, under a continuation of the half-ounce unit, the proportion of circular envelopes had fallen to 10.3 per cent., and in 1886, under the ounce unit, it fell to 9.3 per cent. As compared to the year ended June 30, 1882, the issues for the year ended June 30, 1886, showed an increase of 90,829,650, or 48.2 per cent., in envelopes for sealed inclosures, and of only 1,827,500, or 6.7 per cent., in envelopes for unsealed circulars.

With respect to postal cards the issues during the fiscal year ended June 30, 1886, showed an increase over the previous year of only 16,231,500, or 4.7 per cent., as against an increase of 183,454,481, or 11.6 per cent., in the issue of postage-stamps and stamped envelopes. The number of postal cards issued during the last year was only 4,150,000, or 1.1 per cent., in excess of the number issued during the year ended June 30, 1882. The increase in number of postage-stamps and stamped envelopes of all kinds for the same period was 602,000,888, or 43.4 per cent. These figures manifest the public appreciation of the inducements to sealed inclosures offered by the reduction in the letter rate of postage and the increase of the unit of weight. The statistics of second-class matter show that the reduction in the rate of postage did not have the effect of unduly increasing the use of the mails for matter of that kind, but the revenue from this source will show an increase for the present over the past year in keeping with the general augmentation of business.

A new source of revenue, to which reference has been made, is through the special-delivery system. The system was in effect for nine months only of the past fiscal year, and then under such conditions as not to be productive of a comparatively large revenue. Under the extension of the system, on the 1st of October last, to all post-offices, and to all classes of mailable matter, the receipts from this source for the present year should be largely in excess of those for the past year.

Some additional revenue will also be gained from the admission of liquids in the mails under your order of July 17, 1886.

It has been seen that all the elements entering into the revenue favor an increase. Only partial results since the 1st of July are ascertainable at the present time. The Auditor is now engaged on the accounts for the quarter ended September 30; and the results of that quarter from all the post-offices will not be known until in January. Special returns have, however, been obtained by this office from 30 of the principal post-offices for the quarter ended September 30, these 30 offices collecting, as previously stated, nearly 40 per cent. of the entire postal receipts. The returns show an increase at the 30 offices in question of \$367,124.59, or 9.5 per cent., for the quarter ended September 30, as compared to the corresponding quarter of the previous year. There would have been a larger increase except for the fact that there was a reduction in the price of stamped envelopes, announced to take effect on the 1st of October, under a new and more favorable contract. While the announcement probably led to some curtailment in the purchases by the public of ordinary stamped-envelopes, its effects were felt chiefly in the sale of envelopes printed with special return requests. These envelopes are furnished only in quantities of not less than 500 in any case, and payment for them is required in advance of their supply. To a large extent purchases were delayed to await the expected reduction of prices, and small supplies of adhesive stamps or ordinary stamped-envelopes were bought as a temporary expedient. Thus, while there had been an increase of 11.6 per cent. in number of special-request envelopes for the

year ended June 30, 1886, as compared to the issue of the previous year, the quarter ended September 30, 1886, exhibited a decrease of 2.4 per cent. as compared to the corresponding quarter of the previous year. The sales of these envelopes for the quarter ended September 30 were affected to the probable extent of at least \$100,000, by far the greater share of which amount concerned the 30 principal post-offices under discussion.

In second-class matter, separately considered, the returns from the thirty principal offices for the quarter ended September 30 showed an increase of \$21,860.54, or 12.2 per cent., over the receipts for the quarter ended September 30, 1885. Nearly 75 per cent. of the total revenue from second-class matter is collected at these 30 offices.

In the light of past experience the smaller offices should exhibit a better gain for the past quarter than for the two preceding ones, and the gross revenue for the quarter ended September 30 will probably show an increase of nearly 9 per cent. over the revenue for the corresponding quarter of the previous year.

These results and the manifestations of growing improvement at the smaller offices justify the expectation of a large increase of revenue for the present over the last fiscal year.

The expenditures of the postal service are borne in largest part out of its receipts, the deficiency being supplied out of the general Treasury. It is best, on all accounts, that the estimates of postal revenue should be very conservative, and that the burden on the Treasury should not be underestimated. In this view of the case, in estimating for the present fiscal year, allowance will be made for an increase over the past year of only 7 per cent. in the ordinary postal revenue, exclusive of the receipts from second-class matter for both years. For second-class matter allowance will be made for an increase of only 10 per cent. on the receipts for the last fiscal year. The amounts to be yielded at these rates are \$45,473,122.35 of ordinary postal revenue, exclusive of second-class matter, and \$1,209,588.48 for second-class matter. For the next fiscal year allowance will be made for an increase on these sums of only 7 per cent. for ordinary revenue, exclusive of second-class matter, and of 8 per cent. for second-class matter. The estimates for the next year amount, therefore, to \$48,656,240.91 from the former, and \$1,306,355.55 from the latter source.

The receipts from money-order business are now estimated by the Superintendent of the Money-Order System at \$630,000 for the present, and \$650,000 for the next fiscal year. The total estimated gross receipts amount, therefore, to \$47,312,710.83 for the year ending June 30, 1887, and \$50,612,596.46 for the year ending June 30, 1888. With a fairly prosperous condition of the business of the country, these estimated amounts are much more likely to be exceeded than diminished by actual results.

With regard to the expenditures of the current fiscal year, the appropriations authorize a total outlay of \$54,365,863.25, exclusive of an indefinite amount allowed for fees to compensate the performance of special-delivery service.

A careful revision of the subject just made by the several departmental officers charged with supervising the expenditures, places the total outlay for the year at \$53,523,968.59, not including the fees for special delivery service and the amount certified to the Secretary of the Treasury for mail transportation of the Pacific railroads and not chargeable to the appropriations for the postal service. The account for the current

fiscal year may be stated, on the basis of the foregoing estimates, as follows:

FISCAL YEAR ENDING JUNE 30, 1887.

Amount of ordinary postal revenue, exclusive of receipts from second-class matter, for year ended June 30, 1886	\$42,498,245 19	
Add increase of 7 per cent	2,974,877 16	
		<u>\$45,473,122 35</u>
Amount of revenue from second-class matter, year ended June 30, 1886	1,099,625 89	
Add increase of 10 per cent	109,962 58	
		<u>1,209,588 48</u>
Ordinary postal revenue—total estimated amount		46,682,710 83
Amount of estimated revenue from money-order business		630,000 00
		<u>47,312,710 83</u>
Total estimated gross receipts for year ending June 30, 1887		47,312,710 83
Deduct total amount of expenditures payable out of appropriations, as at present estimated		53,523,968 59
		<u>6,211,257 76</u>
Leaves estimated deficiency of revenue to be supplied out of the general Treasury		6,211,257 76
Estimated expenditures as above		53,523,968 59
Add estimated amount subject to certification on account of mail transportation on Pacific railroads		1,336,481 00
		<u>54,860,449 59</u>
Estimated total cost of service		54,860,449 59
Excess of estimated cost of postal service over estimated postal revenue		<u>7,547,738 76</u>

The estimated revenue of the year ending June 30, 1887, is \$6,211,257.76, or 11.6 per cent., less than the estimated expenditures, and \$7,547,738.76, or 13.7 per cent., less than the total estimated cost of the postal service, inclusive of the estimated amount subject to certification on account of mail transportation on the Pacific railroads.

As compared to the year ended June 30, 1886, the estimates for the current fiscal year contemplate an increase of \$3,376,462.13, or 7.6 per cent., in the net postal receipts; of \$2,445,700.77, or 4.7 per cent., in the total expenditures payable out of appropriations; and of \$2,670,043.37, or 5.1 per cent., in the total cost of the postal service.

In the estimated expenditures no allowance is made for compensation for the performance of special-delivery service, no definite appropriation being necessary for that object; but the outlay will be more than reimbursed by the receipts from that source, which were not taken into account in the estimates of revenue. The tendency of the system will be, therefore, to lessen the amount of the deficiency of revenue to be required out of the general Treasury.

FISCAL YEAR ENDING JUNE 30, 1888.

The estimates of revenue for the year ending June 30, 1888, have been given in connection with those of the present year. The estimates of expenditures for the year, to be payable out of definite appropriations, have only just been completed and sent to the Secretary of the Treasury for submission to Congress. They are in detail of all the various objects, and are accompanied by full explanations of the necessities of the service as well as it may be possible to forecast them. The total amount of the appropriations called for by the estimates is

\$55,342,150.15. The account for the year ending June 30, 1888, may be stated on the basis of the estimates, as follows, viz:

FISCAL YEAR ENDING JUNE 30, 1888.

Estimated amount of ordinary postal revenue, exclusive of receipts from second-class matter, for year ending June 30, 1887	\$45,473,122 35	
Add increase of 7 per cent	3,183,118 56	
		\$48,656,240 91
Amount of estimated revenue from second-class matter for year ending June 30, 1887	1,209,588 48	
Add increase of 8 per cent	96,767 07	
		1,306,355 55
Total estimated ordinary postal revenue		49,962,596 46
Amount of estimated revenue from money-order business		650,000 00
Total estimated gross receipts for year ending June 30, 1888		50,612,596 46
Deduct total amount of expenditures payable out of appropriations as now estimated		55,342,150 15
Leaves estimated deficiency of revenue to be supplied out of the general Treasury		4,729,553 69
Estimated expenditure as above		55,342,150 15
Add estimated amount subject to certification on account of mail transportation on Pacific railroads		1,386,500 00
Estimated total cost of service		56,728,650 15
Excess of estimated cost of postal service over estimated postal revenue		6,116,053 69

The estimated revenue of the year ending June 30, 1888, is \$4,729,553.69, or 8.5 per cent., less than the estimated expenditures, and \$6,116,053.69, or 10.7 per cent., less than the total estimated cost of the postal service, inclusive of the estimated amount, subject to certification on account of mail transportation on the Pacific railroads. As compared to the year ending June 30, 1887, the estimates for the next fiscal year contemplate an increase of \$3,299,885.63, or 6.9 per cent., in the gross postal receipts; of \$1,818,181.56, or 3.3 per cent., in the total expenditures payable out of appropriations; and of \$1,868,200.56, or 3.4 per cent. in the total cost of the postal service. As in case of the estimates for the year ending June 30, 1887, no allowance is made for the receipts and expenditures of the special-delivery system, and the net profits from this source will tend to diminish the estimated deficiency of revenue shown in the foregoing statement.

The deficiency in the revenue for the years 1877 and 1888 are likely to be much less than the amounts at which they are given in the foregoing statements, for two reasons. First, the estimates of the postal revenue are very conservative; and, second, in estimating for the expenditures it is only proper to allow for sums that will exceed rather than fall short of the actual requirements.

REVIEW OF FINANCIAL EXHIBITS AND ESTIMATES—1883 TO 1888.

The foregoing exhibits and estimates embrace a period of five years from the 1st of July, 1883, to the 30th June, 1888; and a brief review of the changed financial conditions of the service during the intervening time may not be without interest.

The net postal receipts for the year ended June 30, 1883, amounted to \$45,469,889.79 (excluding amount charged to bad debts), and the total

cost of the service during that year, (including the amounts certified to the Secretary of the Treasury under the act of Congress of March 3, 1879, for mail transportation on the Pacific railroads and not chargeable to the appropriations for the postal service,) was \$44,436,656.62.

For the first time in many years the postal service had become self-sustaining in 1882, and for the year ended June 30, 1883, it yielded a net profit of \$1,033,233.17, or 2.3 per cent., over the entire cost of its maintenance. On the 1st October, 1883, the rate of postage on first-class matter was reduced from 3 cents to 2 cents for each half ounce or fraction thereof, and the immediate effects of the change were again to make the postal service a burden upon the general Treasury.

The revenue for the year ended June 30, 1884, was \$43,317,502.98, a decrease of \$2,152,386.81, or 4.7 per cent., from the revenue of the previous year. The decrease was due mainly to the reduction in the letter rate of postage, but also in no small part to a depression in the business interests of the country, then recently inaugurated. The year ended June 30, 1884, was also a bad one for the postal service in the matter of its expenditures. These were increased at the rate of more than 9 per cent. over those of the preceding year, as against an average annual increase of about 4.5 per cent. for the two years ended June 30, 1883, when the revenue was in an unusually prosperous condition, having yielded an average annual increase of about 11 per cent.

The cost of the postal service for the year ended June 30, 1884, was \$48,609,541.91, and this was \$4,172,885.29, or 9.3 per cent., more than the cost for the year ended June 30, 1883. It was also \$5,292,038.93, or 10.8 per cent., more than the amount of the postal revenue. Adding to this amount the surplus revenue of \$1,033,233.17, shown for the previous year, it appears that the general Treasury was net loser through the postal service in the sum of \$6,325,272.10 for the year ended June 30, 1884, as compared with the year ended June 30, 1883. This great burden, and the further loss of revenue promised by the growing depression of business, offered the strongest incentive to a careful economy of the expenditure, so largely augmented during the preceding year. Such was the situation on the 1st July, 1884. At the end of the fiscal year then begun the balance sheet had become still more unfavorable.

The net revenue for the year ended June 30, 1885, was \$42,560,843.83, and this was a decrease of \$756,659.15, or 1.7 per cent., from the revenue of the previous year.

The cost of the postal service for the year ended June 30, 1885, was \$50,852,509.53, and this was \$2,242,967.62, or 4.6 per cent., more than the cost for the previous year.

The cost of the service was \$8,291,665.70 more than the amount of the postal revenue, and the charge on the Treasury showed an increase of \$2,999,626.77 over that of the previous year.

The net revenue for the year ended June 30, 1886, was \$43,936,248.70, and this was an increase of \$1,375,404.87, or 3.2 per cent., over the net revenue of the previous year.

The cost of the postal service (estimated in small part only) was \$52,190,406.22, and this was an increase of \$1,337,896.69, or 2.6 per cent., over the cost of the previous year. The cost of the service was \$8,254,157.52 in excess of the amount of the net revenue, and the burden on the Treasury was reduced in the sum of \$37,508.18, in the face of a loss of \$1,099,625.89 from the reduction in the rate of postage on second-class matter, and of an estimated loss of \$800,000 from the increase of the unit of weight of first-class matter.

The estimated revenue for the year ending June 30, 1887, is

\$47,312,710.83, and this is an increase of \$3,376,462.13, or 7.6 per cent., over the net revenue of the previous year.

The estimated cost of the service is \$54,860,449.59, and this is an increase of \$2,670,043.37, or 5.1 per cent., over the cost for the year ended June 30, 1886. The estimated cost of the service is \$7,547,738.76 more than the estimated revenue, and this amount is \$706,418.76 less than the amount charged against the Treasury during the previous year.

The estimated revenue for the year ending June 30, 1888, is \$50,612,596.46, and this is an increase of \$3,299,885.63, or 6.9 per cent., over the estimated revenue for the current fiscal year.

The cost of the postal service for the year ending June 30, 1888, is estimated at \$56,728,650.15, and this is \$1,868,200.56, or 3.4 per cent., more than the estimated cost for the present fiscal year. The estimated cost of the service is \$6,116,053.69 in excess of the estimated revenue, and this excess is \$1,431,685.07 less than the estimated excess for the current fiscal year.

Notwithstanding the loss of nearly \$2,000,000 from the reduction in the rate of postage on second-class matter and from the increase in the unit of weight of first-class matter, the estimated amount chargeable to the general Treasury for the maintenance of the postal service for the year ending June 30, 1888, is only \$824,014.76 more than the amount charged to the Treasury in the year ended June 30, 1884, and it is \$2,175,612.01 less than the amount charged for the year ended June 30, 1885. The estimated amounts chargeable to the general Treasury for the current and the next fiscal years will probably be greatly reduced, both by an increase of the estimated postal revenue and by a decrease of the estimated expenditures. From the tendencies shown, it is evident that with a prosperous condition in the business of the country to favorably influence the revenue, and with a continued exercise of care in regulating the expenditures, the postal service will again at no distant day become a self-supporting institution.

SPECIAL-DELIVERY SYSTEM.

The special-delivery system was inaugurated on the 1st of October, 1885, under the authority of the act of Congress of March 3, 1885, and the methods employed for conducting its operations were fully explained in my last annual report. The privileges of immediate delivery were restricted by the act to cities and towns having a population of 4,000 or over (555 in number), and they were also confined to mailable matter of the first class.

The results of the system for the nine months ended June 30, 1886, are briefly summarized as follows:

1. The total number of letters received for special delivery at all the special-delivery offices was 896,334, of which 622,054, or 69.4 per cent., were received in the mails from other post-offices, and 274,280, or 30.6 per cent., were deposited for local delivery.

2. The total deliveries by special messenger numbered 845,652, or 94.3 per cent. of the whole, leaving 50,682, or 5.7 per cent., to be delivered by letter-carriers or other regular employés.

3. The value of the special-delivery stamps (in addition to the postage) on the letters received for special delivery was \$89,633.40. The amount of fees paid to the messengers, as shown by the report of the Auditor, was \$67,652.14, leaving \$21,981.26 as a net profit to the Government. The value of the special-delivery stamps sold at the 555 special-delivery offices, as reported to this office, was \$80,666. The

amount sold at all the post-offices cannot be stated, since the sales of all kinds of stamps are embraced in a single item in the quarterly account-current to the Auditor.

4. The average number of messengers employed during each of the nine months was 1,177, and the average monthly compensation paid to each messenger was \$6.39.

The statistics of the system for the first full year of its operation, from October 1, 1885, to September 30, 1886, are collated as follows, viz:

1. The total number of letters received for special delivery was 1,118,820; of these 785,020 were received in the mails from other offices, and 333,800 were drop letters.

2. The number of letters delivered by special messengers (excluding those delivered by letter-carriers or other regular postal employés) was 1,059,864.

3. The value of the special-delivery stamps attached to letters received for special delivery at special-delivery offices was \$111,882. The amount of fees paid, as shown by the audited returns for nine months to June 30, 1886, and reports to this office for the quarter ended September 30, was \$84,784.42, leaving a net profit to the Government on these figures of \$27,097.58. The value of the special-delivery stamps sold at 555 special-delivery offices was \$96,664.30.

4. The average monthly number of messengers employed during the year was 1,112, and the average monthly compensation to each messenger was \$6.35.

5. The average time consumed in the delivery of letters after receipt at post-offices of destination was 19 minutes.

The statistics by quarters, and in detail, of each of the special-delivery offices will be found in Table No. 20 attached to this report.

The results of the system for the first year of its operation leave no room to doubt the popular appreciation of its usefulness; indeed, considering the limited field to which it was restricted by the law authorizing its creation, it is somewhat remarkable that the patronage it received should have reached such considerable proportions. Defects in the organic act were seen when the system was being introduced, and attention was called to them in your last annual report, with suggestions for appropriate remedies. The attention of Congress was also invited to the matter in a special communication submitting a draft of a bill to carry out the views of the Department.

* * * * *

EXPENDITURES, APPROPRIATIONS, AND ESTIMATES FOR THE SERVICE OF THIS OFFICE.

The expenditures for the service of this office for the fiscal year ended June 30, 1886, amounted to \$1,082,219.19, the several objects and amounts appearing in table No. 3 attached to this report. In the aggregate there was an increase of only \$10,080.44, or .9 per cent., over the expenditures of the year ended June 30, 1885, and there was a decrease of \$5,993.89, as compared to those of the year ended June 30, 1884. In detail of the principal items there was a decrease for the last as compared to the previous fiscal year of \$22,784.38, or 16.5 per cent., for the manufacture of adhesive postage-stamps; of \$15,874.81, or 8.5 per cent., for postal cards, and of \$17,731.05, or 19.6 per cent., for registered package, tag, and official envelopes, and an increase of \$66,269.48, or 10.5 per cent., for stamped envelopes and newspaper wrappers. In the quantities furnished there was an increase of 10.2 per cent. in adhesive

postage-stamps, of 4.7 per cent. in postal cards, and 32.7 per cent. in registered-package and tag envelopes, and the decrease of expenditure, in the face of this increase of quantities, was due to more advantageous contracts for the supply of the articles. The increase of expenditure for stamped envelopes was occasioned by the additional quantities called for, the articles having been furnished during both fiscal years under the same contract.

The appropriations for the last fiscal year amounted to \$1,334,400. In nine items the unexpended balances of appropriations amounted to \$252,231.64, or 18.8 per cent. of the amount appropriated, and in the remaining item (for ship, steamboat, and way letters) the appropriation was \$2,000 and the expenditure was \$2,050.83, leaving a deficiency of \$50.83 to be provided for. The net excess of the appropriations over the expenditures was, therefore, \$252,180.81.

The appropriations for the present year aggregate \$995,400, or \$339,000 less than the appropriations for the last fiscal year.

The current appropriations are likely to prove insufficient in two or three items, owing to an unexpectedly large increase in the demand for supplies since the estimates were made in November last. In view of the uncertainty as to future demands, no reliable judgment can at present be formed as to the additional amounts that may be required. Better light will be afforded by the issues of the present quarter, in time to submit the deficiency estimates to Congress. In no case, however, is the gross amount likely to exceed \$75,000, and a large part of this sum will be due to the recent introduction of letter-sheet envelopes.

The total amount of the estimated appropriations to be required for the fiscal year ending June 30, 1888, is \$1,244,822. This is an increase of \$162,602.81, or 15 per cent., over the expenditures for the fiscal year ended June 30, 1886, and of \$172,683.25, or 16.1 per cent., over the expenditures for the year ended June 30, 1885. It is \$89,578, or 6.7 per cent., less than the appropriations for the year ended June 30, 1886, and it is \$249,422, or 25 per cent., more than the appropriations for the current fiscal year. The estimates contemplate a liberal increase in the quantities of supplies to be required, and it is not doubted that they will prove sufficient throughout to cover probable needs. In the principal items the increase of expenditure will result in a proportionable increase of the postal revenue. The estimates are explained in detail in my letter addressed to you under date of October 12, 1886, a copy of which is hereto appended.

DIVISION OF FINANCE.

The work of the finance division during the fiscal year ended June 30, 1886, may be summarized as follows, viz:

There were 4,800 contracts for mail service received during the year from the Second Assistant Postmaster-General, and 24,287 orders of the Postmaster-General recognizing mail service not under contract, curtailing or extending service, or modifying previous orders. These contracts and orders were entered upon the books of the finance division, for information when acting upon certificates of the Auditor of the Treasury for the Post-Office Department for the payment of mail contractors and other creditors of the Department. The number of such certificates received and acted upon was 72,999, a decrease of 1,660 from the previous year.

In addition to the above, 5,063 certificates were received from the Auditor, upon which 5,063 transfer drafts, covering the sum of \$832,555.45,

were drawn against postmasters having a surplus of postal revenue, in favor of late postmasters or postmasters whose revenues were insufficient to meet the demands upon their offices for payment of railway postal clerks, mail-messengers, letter-carriers, &c.

The following table will show the number of warrants and transfer drafts drawn, and the number of certificates of deposit received, entered, and passed to the Auditor during the past fiscal year, compared with the number for the previous year.

	Fiscal year ended June 30—		Increase.
	1885.	1886.	
Number of warrants	74, 659	72, 909	*1, 660
Number of transfer drafts	5, 395	5, 063	*332
Number of certificates of deposit	180, 838	196, 284	15, 546
Total.....	260, 892	274, 446	12, 554

• Decrease.

There were also prepared and forwarded 3,860 letters pertaining to the business of the division, 74,490 circulars pertaining to the issue of warrants, and 69,840 circulars containing instructions to postmasters as to the time, manner, and place of deposit of postal funds, and demands for balances due the Government and not promptly remitted.

The number of cases of delinquencies made up in the finance division during the year and referred to the chief post-office inspector for investigation was 890. The number of cases prepared for the action of the Postmaster-General, concerning false returns by postmasters of the cancellation of stamps, failures to account for box-rents collected, and overcharges for clerk hire and rent of post-offices was 172, resulting in charges amounting to \$78,575.60 against the accounts of the offending postmasters.

In my last annual report an increase from \$2,000 to \$2,250 in the salary of the chief of the finance division was recommended, but this recommendation, though supplemented by one from yourself, did not meet with favorable action by Congress. The position is an arduous and responsible one, and the present incumbent, Mr. George W. Wells, is an officer of unusual efficiency and worth. I am induced by the exceptional merits of the case to urgently renew the recommendation made last year for the increase of his compensation. I also desire to invite attention to the recommendations made in my last annual report looking to a better and uniform system of accounts in the larger post-offices, and to a change in the system of accounting for the key-deposit fund.

DIVISION OF POSTAGE-STAMPS, STAMPED ENVELOPES, AND POSTAL CARDS.

The stamp division is charged with the duty of issuing postage-stamps, stamped envelopes, postal cards, and registered-package and official envelopes, upon the requisitions of postmasters. The articles of

stamped paper issued to postmasters for sale to the public during the year ended June 30, 1886, consisted of the following, viz :

Description.	Number.	Value.
Ordinary adhesive postage-stamps.....	1,620,784,100	\$31,172,364 00
Newspaper and periodical stamps.....	2,755,461	1,097,890 00
Postage-due stamps.....	5,469,650	159,989 00
Special-delivery stamps.....	3,699,560	369,956 00
Stamped envelopes, plain ...	155,393,850	3,046,670 97
Stamped envelopes, printed request.....	152,742,250	3,352,317 05
Newspaper wrappers.....	45,872,000	533,067 00
Postal cards.....	355,618,000	3,557,970 00

This was a total of 2,342,364,871 in number and of \$43,289,724.02 in value. The gross value of all the stamped envelopes and wrappers issued was \$6,932,055.02, and the value of the stamps impressed upon the envelopes and wrappers was \$6,216,645.50, leaving \$715,409.52 to represent the cost of manufacture and expenses of issue. The cost of manufacture at contract rates was \$692,514.25, but the actual expenditure was \$692,435.04, the sum of \$79.21 having been deducted for special-request envelopes that were misprinted through the fault of the contractor. The difference between the cost at contract rates and the amount (less the postage) fixed for the sale of the envelopes and wrappers to the public was \$22,895.27, and this amount represents the expenses of issue.

As compared to the issues of the preceding year, there was an increase of 155,661,165, or 10.62 per cent., in number, and of \$2,742,736, or 9.64 per cent., in value, of ordinary adhesive postage-stamps; of 38,147, or 1.40 per cent., in number, and a decrease of \$949,878.50, or 46.39 per cent., in value, of newspaper and periodical stamps; there was a decrease of 7,201,091, or 56.83 per cent., in number, and of \$148,503, or 48.13 per cent., in value, of postage-due stamps; there was an increase of 13,021,700, or 9.14 per cent., in number, and of \$279,509.53, or 10.10 per cent., in value, of stamped envelopes, plain; of 15,945,500, or 11.65 per cent., in number, and \$346,220.95, or 11.51 per cent., in value, of stamped envelopes, printed request; of 2,289,500, or 5.25 per cent., in number, and \$26,362, or 5.20 cent., in value, of newspaper wrappers; and of 16,231,500, or 4.78 per cent., in number, and \$163,005, or 4.80 per cent., in value, of postal cards.

The large decrease in the value of newspaper and periodical stamps was due to the reduction, on the 1st of July, 1885, of the rate of postage on second-class matter from 2 cents to 1 cent per pound. The decrease in the number and value of postage-due stamps issued was occasioned by the increase in the unit of weight of first-class matter from half an ounce to one ounce, which went into effect on the same date. The net increase in the issues was 199,685,981, or 9.31 per cent. in number, and \$2,829,407.98, or 6.99 per cent., in value.

The issues will be found in detail of kinds and denominations in Tables Nos. 5, 6, and 7, attached to this report.

In addition to the supplies above enumerated, there were issued for the use of the postal service 10,953,800 registered-package envelopes, 999,250 tag envelopes for registered packages, 2,515,000 envelopes for returning dead-letters, 27,610,600 official envelopes for postmasters and other postal officials, and 5,984 newspaper and periodical stub-books.

The total number of registered-package and tag envelopes was 11,953,050, and of dead-letter and official envelopes, 30,125,600, or 42,078,650 of all kinds. This was an increase of 2,624,050, or 28 per cent., in registered-package and tag envelopes; of 7,772,750, or 34.7 per

cent., in dead-letter and official envelopes; and of 10,396,800, or 32.7 per cent., of all kinds over the issues of the preceding year.

This exceptionally large increase was due to the fact that there was an exceedingly unfavorable contract for these supplies during the year ended June 30, 1885, and an exceedingly favorable one for the year ended June 30, 1886. Under the former contract the supplies to postmasters were confined to urgent current needs, to save as far as possible an unnecessary waste of expenditure, and under the latter contract advantage was taken of the low prices, not only to renew the stock carried in post-offices which had been largely depleted, but to furnish unusually liberal quantities against future needs. The issues for the year ended June 30, 1885, under the first-mentioned contract, showed a diminution in spite of the increased needs of the service of about 19 per cent., as compared to those of the year ended June 30, 1884. The cost of registered-package, tag, official, and dead-letter envelopes furnished during the year ended June 30, 1886, was \$72,366.21, (including \$40.61 for contract samples,) while the cost of like quantities at the prices in the contract for the preceding year would have amounted to \$127,703.22. The saving by the change of contracts was therefore \$55,337.01, or 43.3 per cent. The subject will be further referred to hereafter.

REQUISITIONS.

The following tabular statement will show the number of requisitions from postmasters upon which the several kinds of supplies were furnished, and a comparison with the number of requisitions filled during the preceding fiscal year :

Articles.	Requisitions filled during year ended June 30, 1885.	Requisitions filled during year ended June 30, 1886.	Increase.	
			Number.	Per cent.
For ordinary postage-stamps.....	150, 176	174, 321	24, 145	16. 0
For postage-due stamps	14, 519	9, 832	*4, 687	*32. 2
For newspaper and periodical stamps.....	10, 046	9, 412	*634	*6. 3
For stamped envelopes, plain.....	75, 731	79, 279	3, 548	4. 6
For stamped envelopes, request	99, 156	107, 543	8, 387	8. 4
For postal cards	70, 008	65, 179	*4, 829	*6. 8
For registered-package envelopes.....	57, 304	64, 358	7, 054	12. 3
For tag envelopes	1, 926	2, 866	940	48. 8
For official envelopes	24, 911	32, 490	7, 579	30. 4
For newspaper and periodical receipt-books.....	2, 074	4, 402	2, 328	112. 2
Total.....	*505, 851	549, 682	†43, 831	†8. 6

* Decrease. † Net increase.

PARCELS.

The number of separate parcels in which the supplies were put up and forwarded to postmasters was as follows, viz :

Ordinary postage-stamps	177, 901
Newspaper and periodical stamps.....	9, 382
Postage-due stamps.....	9, 990
Stamped envelopes, plain.....	119, 553
Stamped envelopes, printed request	101, 468
Postal cards	75, 251
Registered-package envelopes	} 71, 715
Tag envelopes for registered parcels	
Official and dead-letter envelopes.....	41, 233
Newspaper and periodical receipt books	4, 402
Total..	610, 855

The increase in the total number of parcels over those sent for like purposes during the preceding year was 56,881, or 10.2 per cent.

POSTAGE ON SECOND-CLASS MATTER.

By the act of March 3, 1885, the rate of postage on second-class matter (newspaper and periodical publications mailed from known offices of publication and news agencies, and addressed to regular subscribers and news agents) was reduced from 2 cents to 1 cent per pound, to take effect July 1, 1885. The weight of second-class matter sent in the mails during the last year, not including matter circulated free within the county of publication, was 109,962,589 pounds, or 54,981 $\frac{589}{1000}$ tons, and the amount of postage collected was \$1,099,625.89. This was an increase of 8,904,626 pounds, or 8.81 per cent., in weight, and a decrease of \$921,533.37, or 45.59 per cent., in the amount of postage collected, as compared to the previous year. The average annual rate of increase for the six years prior to July 1, 1885, was 12.09 per cent., and the reduction in the rate of postage thus does not appear to have had the effect of increasing the use of the mails for the transportation of this class of matter. Accordingly, the loss occasioned by the change during the first year of its operation may be placed in even figures at \$1,100,000, equivalent to the amount actually collected.

The number of post-offices at which second-class matter was mailed was 6,550, an increase in number over the previous year of 465, or 7.64 per cent. Collections amounting to \$2,086.14 were made from publishers and news agents for matter improperly mailed at second-class rates of postage. This is an increase of \$995.77, or 91 per cent., over the amount realized from the same source during the preceding year.

The following is a comparative statement of the second-class matter mailed at twenty of the principal post-offices during the past two fiscal years, viz:

Post-office at—	Year ending June 30, 1885.		Year ending June 30, 1886.	
	Number of pounds mailed.	Amount of postage collected.	Number of pounds mailed.	Amount of postage collected.
New York, N. Y.	24,805,630	\$496,112 72	26,334,916	\$263,349 16
Chicago, Ill.	10,311,168	206,223 72	10,773,659	107,736 59
Boston, Mass.	6,078,183	121,561 70	6,811,396	68,253 66
Philadelphia, Pa.	4,072,161	89,443 22	3,788,800	57,804 00
Saint Louis, Mo.	4,877,101	97,542 02	5,014,144	50,141 44
Cincinnati, Ohio	3,077,059	61,541 00	3,788,941	37,889 41
San Francisco, Cal.	3,760,170	75,223 52	1,011,001	10,110 01
Milwaukee, Wis.	1,606,710	32,131 38	1,808,774	18,087 74
Detroit, Mich.	1,500,811	30,016 02	1,011,839	10,118 39
Louisville, Ky.	1,461,460	29,220 38	1,488,000	14,880 00
Saint Paul, Minn.	1,211,108	24,222 70	1,460,060	14,600 60
Washington, D. C.	1,260,412	25,208 24	1,430,074	14,300 74
Cleveland, Ohio	1,168,505	23,371 00	1,130,298	11,302 98
Kansas City, Mo.	1,100,986	22,019 72	1,213,092	12,130 92
Toledo, Ohio	1,277,477	25,549 54	1,157,151	*11,571 51
Pittsburg, Pa.	1,007,304	20,146 08	1,000,260	10,002 60
Baltimore, Md.	824,018	16,480 36	1,000,102	10,001 02
Augusta, Me.	631,160	12,623 20	1,000,007	10,000 07
Elgin, Ill.	1,084,700	21,694 12	1,007,036	*10,070 36
New Orleans, La.	785,400	15,708 18	790,082	7,900 82
Total	71,224,839	1,424,492 78	76,376,060	762,760 50

* Decrease.

Post-office at—	Increase in pounds mailed, and decrease in amount of postage collected for 1884.				Percentage of total amount collected in the United States.
	Increase in pounds mailed.	Decrease in amount of postage collected.	Percentage of increase in pounds mailed.	Percentage of decrease in postage collected.	
New York, N. Y.....	1, 529, 280	\$232, 763 58	6. 16 +	46. 91 +	22. 95—
Chicago, Ill.....	462, 473	98, 447 13	4. 48 +	47. 75 +	3. 30—
Boston, Mass.....	747, 281	53, 308 04	12. 43—	43. 65 +	4. 27—
Philadelphia, Pa.....	814, 648	41, 575 13	16. 88 +	41. 81 +	5. 28 +
Saint Louis, Mo.....	137, 043	47, 400 58	2. 81—	48. 59 +	4. 56—
Cincinnati, Ohio.....	801, 591	27, 751 59	2. 81 +	45. 09 +	3. 07 +
San Francisco, Cal.....	144, 825	16, 213 51	8. 19 +	45. 90 +	1. 73 +
Milwaukee, Wis.....	92, 455	15, 146 64	5. 74 +	47. 13 +	1. 34 +
Detroit, Mich.....	161, 038	13, 307 63	10. 73 +	44. 63 +	1. 51 +
Louisville, Ky.....	28, 831	14, 346 38	1. 82 +	49. 06 +	1. 35 +
Saint Paul, Minn.....	247, 852	9, 673 16	20. 42 +	39. 78 +	1. 33—
Washington, D. C.....	189, 962	10, 784 50	15. 04 +	42. 48—	1. 33—
Cleveland, Ohio.....	70, 613	10, 979 82	6. 04 +	46. 97 +	1. 12 +
Kansas City, Mo.....	103, 166	10, 038 80	9. 31 +	45. 34 +	1. 10 +
Toledo, Ohio.....	120, 526	13, 978 08	*9. 42—	*54. 79 +	1. 05 +
Pittsburgh, Pa.....	21, 945	10, 153 39	2. 11 +	48. 94 +	0. 86 +
Baltimore, Md.....	115, 144	7, 768 74	12. 88—	43. 56 +	0. 91 +
Annapolis, Md.....	76, 907	8, 542 53	8. 04 +	45. 86 +	0. 81 +
Elgin, Ill.....	76, 820	11, 615 76	*7. 08 +	*53. 54	0. 91 +
New Orleans, La.....	4, 673	7, 807 36	0. 50 +	49. 70 +	0. 72—
Total.....	5, 051, 411	661, 732 28	7. 09	46. 28 +	60. 45—

* Decrease.

CHANGE IN SPECIAL-DELIVERY STAMP.

The privilege of special delivery having been extended to all post-offices, the design of the special-delivery stamp described in my last annual report was changed by substituting the words "secures immediate delivery at any post-office" for the words "secures immediate delivery at a special-delivery office."

INTRODUCTION OF LETTER-SHEET ENVELOPES.

The act of March 3, 1879 (Stats. at Large, vol. 20, p. 362), provided that "the Postmaster-General is hereby authorized to take the necessary steps to introduce and furnish for public use a letter-sheet envelope on which postage-stamps of the denomination now in use on ordinary envelopes shall be placed, * * * to be issued under such regulations as the Postmaster-General may prescribe." The act also made the appropriation for stamped envelopes for that year available for the purchase of letter-sheet envelopes, and it provided that "no money shall be paid for royalty or patent" on such letter-sheet envelopes. All the appropriation acts for the postal service since July 1, 1883, have included the letter-sheet envelopes in the appropriations for stamped envelopes and newspaper wrappers.

It having been found that patents had been granted for nearly every conceivable design of a combined letter-sheet and envelope, no steps were immediately taken by the Department to carry the act of 1879 into effect. An effort was made by the late Postmaster-General Howe in 1882 to introduce letter-sheet envelopes of a pattern that met with his approval, and a contract was made with the party controlling the patent to furnish the envelopes upon such terms as should not require the payment of royalty or the purchase of the patent. The effort came to naught, however, through the failure of the contractor to enter upon the work.

Upon representations that there was a public demand for articles of this character, it was early determined by you to carry the law into operation under such conditions as should involve the Government in no risk or expense. A proposition satisfying these conditions was made by the United States Sealed Postal Card Company of New York, the owners, through letters-patent, of a device that seemed to possess more than ordinary merit. The proposition was accepted, and articles of contract were entered into under date of October 24, 1885. The contract provided that the contractor should bear all the cost connected with the manufacture and issue of the envelopes; the dies and plates to be used for printing the stamps were to be engraved and furnished at the expense of the contractor, subject to the approval of the Postmaster-General, and by such parties as should be satisfactory to him, and they were to become the absolute property of the United States as soon as made, and to be at all times subject to the order and control of the Department. All the work was to be done under the supervision of an agent of the Department, and subject to the approval of the Postmaster-General or his duly authorized representative. A bond, in the sum of \$20,000, with approved sureties, was exacted to protect the interests of the Government and to insure the faithful performance of the contract. By a supplemental contract, executed on the 12th day of August, 1886, the contractor was also required to provide for the transportation of the envelopes to all post-offices where the Postmaster-General should decide to place them on sale, the carriers employed to do the work to be subject to the approval of the Postmaster-General. The safe delivery of the envelopes to the points of destination was guaranteed by a bond of \$50,000. The consideration to be paid the contractor was at the rate of \$2.85 per 1,000 for such envelopes as should actually be sold, payments to be made quarterly upon reports from the postmasters through whose offices the sales were effected. In the event that the envelopes should prove unsalable, they were to be destroyed without compensation to the contractor. The right was reserved to the Postmaster-General to annul the contract at his discretion. The price fixed for the sale of the sheets was at the rate of \$3 per 1,000, in addition to the postage, an increase of 15 cents over the cost of manufacture having been made to cover the clerical expenses of sale at the post-offices. In short, no chance was left through which the Government might become a loser through the effort to introduce the letter-sheet envelopes. On the contrary, all the contingencies of profit or loss are in favor of the Government.

The envelopes are chargeable at letter rates of postage, and being much lighter than letters inclosed in ordinary envelopes, they tend to diminish the weight of the mails and the expenses of transportation. To the extent that they supersede the use of adhesive postage-stamps, the cost of manufacturing and furnishing the stamps will be saved. Where they take the place of stamped envelopes there is an advantage in favor of the letter-sheet envelopes in saving the cost of transportation to the post-offices at which they are sold; and when used in lieu of postal cards there will be the double gain of extra postage and the saving of the cost of manufacturing the cards. The postal revenue is also likely to be profited by the inducement to their use for printed circulars sent by mail. Besides, experience has shown that every additional convenience afforded for correspondence has resulted in increasing the patronage of the mails.

The issue of letter-sheet envelopes was begun on the 18th day of August, the order of that day on the contractors calling for 1,000,000 to be

distributed among twenty-seven of the principal post-offices of the country. The first delivery was made to the New York office on August 23; the dates of delivery to the other offices ranging from the 23d to the 30th of August. The number of envelopes reported sold up to the 30th of September was 1,122,457. Requisitions for additional quantities have been made by nearly all of the offices originally supplied, and urgent calls have been made by many offices, at which it has not been thought expedient for the present, at least, to place them on sale. The original list, however, has been extended to embrace fifty offices up to the 1st of November. The total number of envelopes issued to that date is 2,818,500. The envelopes are furnished in separate sheets, or put up (with the face downwards) in pads or tablets of 25, 50, and 100, respectively, it being supposed that in this form they would prove especially convenient for many purposes.

The envelopes are manufactured and issued by the American Bank Note Company, of New York, the contractor for furnishing adhesive postage-stamps, and the agent employed to represent the interests of the Department in connection with the manufacture and issue of postage-stamps was charged with the additional duty of supervising the manufacture and issue of the envelopes.

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DIVISION OF REGISTRATION.

The registry fees collected during the fiscal year ended June 30, 1886, amounted to \$969,952.70. This was an increase of \$41,054.30, or 4.4 per cent., over the amount collected during the preceding fiscal year.

The classification and number of pieces of matter mailed during the year are as follows: Domestic letters, 8,134,534; domestic parcels, 1,019,373; letters to foreign addresses, 502,723; parcels to foreign addresses, 42,897; and letters and parcels of matter forwarded for the Government, and by law exempted from the payment of the registry fee, 1,948,700; making the total number of all kinds, 11,648,227.

As compared to the previous year, there was an increase of 340,467, or 4.3 per cent., in domestic letters; of 36,070, or 3.6 per cent., in domestic parcels; of 26,917, or 5.6 per cent., in letters to foreign addresses; of 7,089, or 19.8 per cent., of parcels to foreign addresses; and of 194,428, or 11 per cent., in letters and parcels forwarded free for the Government.

Statistics of the registry business will be found more in detail in tables Nos. 8 to 10, hereto annexed.

LOSSES.

The number of reported losses of registered matter from all causes during the year was 4,281, of which investigations were finally completed in 3,207 cases. In 1,956 cases the complaints were found to have been groundless; of the remainder, 543 cases under investigation resulted in the recovery of the articles or in the recovery of the loss from the parties responsible; in 111 cases no trace of the matter could be ascertained, and no collection was made on account of the loss; in 597 cases where the cause of the loss was ascertained no recovery was made. The net losses during the year were thus 708 pieces, or say 1 out of every 16,452 articles registered.

The causes and number of the losses, including those in which recovery was made after investigation, were in detail as follows:

Number lost by burning of or accidents to postal cars	21
Number lost by burning of post-offices.....	13
Number lost by depredations of postal employés.....	413
Number lost by negligence of postal employés.....	387
Number lost by unavoidable accidents.....	52
Number lost by burglaries of post-offices, thefts from postal cars, and robberies of stages.....	254
Total.....	1,140
Add number in which cause of loss was not ascertained	111
Total.....	1,251

The subject of losses is referred to more fully in the report of the chief post-office inspector. Acknowledgments are due to the post-office inspectors for the zeal and efficiency with which they have prosecuted investigations of losses and depredations of registered matter.

It is proper, also, that I should express my appreciation of the valuable services rendered by Mr. Z. Moses, assistant superintendent of the railway mail service, who has been on detailed duty in this office for some years past in connection with the work of the registry system.

INNER REGISTERED SACK EXCHANGES.

The system of inner registered sack exchanges introduced by your order of September 21, 1885, and fully explained in my last annual report, has proved to be more successful even than was anticipated, having resulted in a great saving of labor, and in adding to the security of the registered matter for which it is employed. It was in operation at the close of the fiscal year at 196 post-offices. Numerous applications for the system, in cases where the dispatches were in such quantities as to justify its introduction, were suspended on account of a lack of the necessary rotary locks. Provision for these having been made in the appropriation act for the current year, the system is now being extended to such offices as can use it to advantage.

REGISTRY SYSTEM IN LARGE POST-OFFICES.

During the year in a number of the larger post-offices the method of transacting registry business has been somewhat simplified and improved, the new method conforming very closely to a system that had been previously authorized in two other large offices, and that had been thus tested by experience.

The main features of the improvement are, first, the giving of a separate number, as part of a series of numbers running consecutively through a quarter, to every article of registered matter coming into the post-office for delivery; second, the separation and isolation as far as practicable of the several subdivisions of registry work and the registry force in the post-office; third, a rigid system of receipting, in some form, for all registered matter in its passage through the office from its arrival to its delivery; fourth, the daily balancing of work and records, so as to show all articles on hand at the close of every day and the disposition of all others received during the day; fifth, the use of a card form of combined notice and receipt for registered articles delivered otherwise than through the letter-carrier system.

The advantages of the improvement are, the easy identification of every registered article; the giving to it additional security; the definite placing of responsibility for its custody and disposal; the speedy detection of losses and mistakes, if any should occur, and the greater fa-

cilities thereby given for the investigations of inspectors; a more satisfactory manner of delivering mail to the public; and an economy of labor and office material in performing registry work. Another advantage of very great value indeed, and apparently a necessary concomitant of the system, is the almost immediate development of a higher state of discipline among registry employes, the checking of small irregularities, and a general improvement in precision.

It is intended, as time shall allow, to extend this modification of the registry system to all post-offices where the amount of business will justify it.

EXCHANGES FOR THROUGH-REGISTERED MATTER.

The exchanges for the transmission of through registered matter by means of the through registered pouch, the brass lock pouch, and the inner registered sack systems, all of which have been described in former reports of this office, have been greatly extended during the year. The number of these exchanges in operation on the 30th of June, 1886, was as follows:

Through registered pouch exchanges	327
Inner registered sack exchanges	98
Brass lock registered exchanges.....	199

DIVISION OF FILES, RECORDS, AND MAILS.

The total number of letters and other inclosures received, opened, and examined during the year (exclusive of matter for the division of dead letters, opened in that division) was 1,180,400, an increase of 7,540 over the number for the previous year.

Among them were 825 containing money, and 13,311 containing postage-stamps, stamped envelopes, and postal-cards returned for redemption. The number of registered letters received was 20,096.

Of the letters received 48,076 were briefed and recorded, and filed after final action had been taken upon them. The number of letters written in the office, copied, enveloped, and mailed, was 15,562, exclusive of circulars.

DIVISION OF DEAD LETTERS.

The total number of pieces of original dead mail matter received at the Dead-Letter Office during the year ended June 30, 1886, was 4,791,698, an increase of 239,552, or 5.2 per cent., over the number received during the previous fiscal year. The number of pieces on hand at the commencement of the year was 13,516; 218,531 letters without valuable inclosures sent to the writers were returned undelivered, making, with those above received, the total number of pieces treated during the year 5,023,745, classified as follows:

1. Domestic mailable letters:

(a) Ordinary unclaimed letters	3,552,741
(b) Letters returned from hotels	109,461
(c) Letters bearing fictitious addresses.....	23,059
(d) Letters returned from foreign countries	159,898
(e) Domestic registered letters.....	4,462
(f) Ordinary letters without inclosures sent to writers and returned on account of failure to deliver	218,531
Total	4,068,112

2. Domestic unmailable letters:		
(a) Letters containing unmailable articles	1,389	
(b) Letters held for postage	119,365	
(c) Letters misdirected or only partially addressed	322,706	
(d) Letters without address	15,178	
		<hr/>
3. Domestic parcels of third and fourth class matter.....		458,638
4. Letters mailed in foreign countries.....		81,221
5. Printed matter, samples, &c., mailed in foreign countries and return- able.....		369,902
6. Registered articles:		
(a) Of domestic origin	4,442	
(b) Of foreign origin	11,421	
		<hr/>
		15,863
Total as before.....		<hr/>
		5,023,745

The following was the disposition made of the mail matter treated during the year :

Domestic mailable letters :		
Card and return-request letters delivered unopened		61,348
Letters opened (disposed of as detailed below).....		3,788,234
Ordinary letters without valuable inclosures sent to writers and returned on account of failure to deliver, and subsequently destroyed.....		218,531
Domestic unmailable letters :		
Held-for-postage letters forwarded unopened to address on receipt of postage.....		4,371
Held-for-postage letters on hand at close of the year, awaiting return of notice with postage		263
Misdirected letters forwarded unopened after correction of addresses....		77,618
Held-for-postage letters opened (disposed of as below).....		114,731
Misdirected letters opened (disposed of as below).....		245,088
Letters without address opened (disposed of as below).....		15,178
Letters containing unmailable articles opened disposed of as below.....		1,389
Domestic third and fourth class matter:		
Parcels opened and disposed of as below		81,221
Foreign matter:		
Letters returned to country of origin or delivered to ad- dressees	366,379	
Letters on hand at close of year	3,523	
Parcels of printed matter, samples, &c., returned unopened or delivered to addressees	30,008	
		<hr/>
		399,910
Registered articles:		
Domestic—		
Of domestic origin, delivered unopened.....	1,885	
Of domestic origin, opened.....	2,557	
		<hr/>
		4,442
Foreign—		
Returned to country of origin or delivered to addressees.	11,218	
On hand at close of year	203	
		<hr/>
		11,421
Total		<hr/>
		5,023,745

The following was the disposition of mail matter opened in the Dead-Letter Office :

Delivered :		
Letters containing money.....	12,138	
Letters containing drafts, notes, money-orders, postal notes, and other evidences of monetary value.....	18,105	
Letters containing receipts, paid notes, &c.....	28,135	
Letters containing postage-stamps.....	92,228	
Letters containing nothing of value.....	1,887,359	
Photographs	25,835	
Parcels of merchandise, books, &c.....	39,443	
		<hr/>
		2,103,243

Returned to owners and awaiting evidence of delivery :		
Letters containing money	717	
Letters containing drafts, notes, &c	2, 327	
Registered parcels of merchandise, books, &c.....	20	
		3, 0
Under treatment looking to delivery :		
Letters containing money	1, 036	
Letters without inclosures	20, 200	
		21, 2
Filed upon failure to deliver ; subject to reclamation :		
Letters containing money.....	3, 980	
Letters containing drafts, notes, checks, &c	882	
Letters containing receipts, paid notes, &c	3, 338	
Letters containing postage-stamps.....	4, 281	
Photographs.....	4, 938	
Parcels of merchandise, books, &c.....	41, 700	
		59, 1
Destroyed :		
Letters containing worthless inclosures, and which could not be returned to writers.....	560	
Letters without inclosures, which could not be returned to writers	2, 053, 929	
Parcels containing pamphlets, fruit, cake, seeds, &c.....	11, 033	
		2, 065,

FOREIGN DEAD MAIL MATTER.

Returned to country of origin :		
Registered letters	10, 777	
Ordinary letters.....	353, 204	
Parcels of printed matter, samples, &c.....	23, 982	
		387,
Delivered to addresses upon application :		
Registered letters	331	
Ordinary letters.....	167	
Parcels of printed matter, samples, &c.....	108	
Misdirected matter forwarded to corrected addresses :		
Registered letters.....	60	
Ordinary letters.....	13, 008	
Printed matter, samples, &c.....	5, 918	
		18
On hand under treatment at close of year :		
Registered letters.....	203	
Ordinary letters	3, 523	
		3
		411

MATTER RETURNED FROM FOREIGN COUNTRIES.

The following number of pieces of matter originating in the Uni States was returned to the Dead-Letter Office from foreign count during the year as undeliverable :

Registered letters.....	1
Ordinary letters	168
Postal cards	10
Parcels of printed matter, samples, &c.....	32
	204

DEAD REGISTERED MATTER.

Of the 15,717 unclaimed registered letters and parcels received th were :

Delivered to addressees or restored to senders	15
Returned to postmasters for delivery and awaiting receipts	
Filed upon failure to discover ownership, subject to reclamation.....	
	15

VALUE OF INCLOSURES IN MATTER RESTORED TO OWNERS.

The following shows the number of letters restored to owners or in course of restoration, with the character and value of contents:

Number of letters containing money restored to owners	12, 133
Amount of money inclosed therein	\$21, 732 00
Number of letters containing money outstanding in the hands of postmasters for restoration to owners	717
Amount of money inclosed therein	\$2, 960 62
Number of letters containing drafts, checks, notes, money-orders, &c., restored to owners	18, 105
Value contained therein	\$1, 121, 154 74
Number of letters containing drafts, checks, notes, money-orders, &c., outstanding in the hands of postmasters for restoration to owners...	2, 327
Value contained therein	\$334, 096 58

REVENUE DERIVED FROM DEAD MATTER.

The amount of revenue derived from dead matter during the year is shown by the following statement:

Amount separated from dead letters that could not be restored to owners..	\$6, 426 39
Amount realized from auction sale in December, 1885, of parcels of merchandise	2, 397 17
Amount realized from sale of uncurrent funds remaining from last year ...	6 85
Amount received from the postal administration of Canada for redemption of Canadian stamps received in payment of postage on matter forwarded to that country	48 88
Total	8, 879 29

The money was disposed of as below:

Deposited in the United States Treasury during the year	\$8, 858 33
Loss from sale of mutilated and foreign money	17 96
Uncurrent money to account for in the next fiscal year	3 00
Total	8, 879 29

POSTAGE-STAMPS.

The following amounts of postage-stamps were received in the division of dead letters from the several sources named, and were destroyed under proper supervision:

Separated from dead letters for which no owner could be found	\$510 87
Found loose in the mails and sent to the Dead Letter Office by postmasters.	232 79
Received for payment of postage on held-for-postage matter forwarded to destination, and parcels of third and fourth class matter returned to sender (sent out from the Dead-Letter Office under an official penalty envelope.)	931 76
Total value of stamps destroyed	1, 675 42

In addition to the above, postage-stamps to the value of \$405.74 have been received since February 1, 1886, and affixed to parcels of matter addressed to foreign countries, which, under a modification of the regulations, were transmissible in the mails at letter rates of postage.

DEAD MATTER GIVEN TO CHARITABLE INSTITUTIONS.

During the year, 16,164 magazines, pamphlets, illustrated papers, picture cards, &c., which could not be restored to the owners, were distributed amongst the inmates of the various hospitals, asylums, and other charitable institutions in the District of Columbia, as heretofore, by order of the Postmaster-General.

The following are the numbers of the various articles:

Magazines	1,104
Pamphlets, &c.....	4,364
Illustrated papers.....	3,233
Picture cards, valentines, &c.....	7,400
Total	16,161

COMPARISONS WITH PREVIOUS YEAR.

The increase of matter received at the Dead-Letter Office during the last as compared to the previous fiscal year is not nearly proportioned to that of the volume of matter committed to the mails, and the fact may justly be regarded as a tribute to the growing efficiency of the postal service.

In the total number of pieces of dead mail matter received for treatment there was an increase of only 239,552, or a little over 5 per cent. The statistics given in a previous part of this report of a count of mail matter at twenty of the principal post-offices showed an increase of 19.1 per cent. on the number of pieces of matter mailed for the last week of June of this year as compared to the corresponding week of the previous year. For the last week in September of the present year there was an increase at the same offices of 16.7 per cent. over the number of pieces mailed during the last week of September, 1885.

The report of the Superintendent of Foreign Mails shows that 30,405,847 letters of foreign origin were received in this country for delivery during the past year. This was an increase of 3,605,616, or 13 per cent., over the number received during the previous year. The number of undeliverable letters of foreign origin received at the Dead-Letter Office during the last year was 364,242, and this was a decrease of 28,017, or 7 per cent., as compared to the number received during the previous year.

The number of letters of domestic origin sent abroad during the last year, according to the report of the Superintendent of Foreign Mails, was 37,002,893, an increase of 794,131, or 2 per cent., over the number sent during the previous year. The number of undeliverable letters of domestic origin returned to the Dead-Letter Office from foreign countries during the past year was 159,888, and these were 10,960, or 6 per cent., less than the number returned during the previous year.

In registered matter the number of pieces of domestic registered articles received at the Dead-Letter Office as undeliverable was 2,656, a decrease of 77, or 2.5 per cent., and the number returned from foreign countries was 1,786 pieces, an increase of 478, or 36 per cent., over the number returned the previous year.

The number of pieces of registered matter of foreign origin sent to the Dead-Letter Office as undeliverable in this country was 11,275; and this was a decrease of 1,171, or over 9 per cent., as compared to the number sent during the previous year.

Of the ordinary unclaimed domestic mailable letters received at the Dead-Letter Office during the past year, there was an increase of 136,507, or 4 per cent., as compared to the number received during the previous year.

The letters returned from hotels showed an increase of 7,745, or 7.5 per cent., and the letters bearing fictitious addresses a decrease of 1,947, or 7.5 per cent. In letters containing unmailable matter there was a decrease of 376, or 21 per cent. In held-for-postage letters sent to the Dead-Letter Office, there was an increase of 1807, or about 1.5 per cent.

In misdirected letters, and letters bearing only partial addresses, there was an increase of 38,348, or 13 per cent., and in letters wholly without address there was an increase of 510, or 3.5 per cent.

The domestic parcels of third and fourth class matter showed an increase of 22,025, or 37 per cent., as compared to the previous year; but even this large increase was not in keeping with the increase of such matter committed to the mails during the year.

In the treatment of the matter received at the Dead-Letter Office there were 61,348 card and request letters delivered unopened, and this was an increase of 4,205, or 7 per cent., over the number delivered unopened during the previous year.

The held-for-postage letters addressed to Canada and forwarded unopened from the Dead-Letter Office, upon the receipt of the postage, numbered 4,371, a decrease of 265, or 5.5 per cent., as compared to the previous year.

The misdirected letters forwarded unopened upon correction of addresses showed an increase of 10,368, or 15 per cent., over the number forwarded during the previous year.

In the letters opened in the Dead-Letter Office there was a decrease from the number opened during the previous year of 31,549, or less than 1 per cent.

The number of opened letters restored to owners was 2,103,243, and this was an increase of 481,830, or 29 per cent., over the number restored during the previous year.

The number of letters containing nothing of value and which it became necessary to destroy for want of any clue for their restoration was 2,053,929, and this was a decrease of 314,695, or 13 per cent., as compared to the number destroyed the previous year.

The number of letters received at the Dead-letter Office inclosing money was 15,911, and the amount contained therein was \$28,130.41, a decrease of 668, or 4 per cent., in the number, and of \$2,037.07, or 6 per cent., in the amount.

The number of letters received which contained money-orders, notes, checks, and other evidences of monetary value, was 19,488, an increase of 437, or 2 per cent., over the previous year. The nominal value represented was \$1,240,506.89, a decrease of \$548,349.33, or 30 per cent., as compared to the amount received the previous year.

The number of letters containing receipts, paid notes, and other papers of minor value was 32,033, an increase of 5,776, or nearly 22 per cent.

The number containing photographs was 30,773, a decrease of 1,958, or nearly 6 per cent., and the number containing postage-stamps was 96,509, a decrease of 11,251, or 10 per cent.

The number of letters containing articles of merchandise together with the parcels of third and fourth class matter sent to the Dead-Letter Office during the year was 92,196, and this was an increase of 10,530, or 12 per cent., over the number received during the previous year.

The number of letters inclosing money which were restored to their owners during the year was 12,138, containing \$21,732.41, being 76 per cent. of the total number of letters received, and 77 per cent. of the total values inclosed.

Of the letters inclosing money-orders, notes, drafts, &c., 18,105, containing a representative value of \$1,121,151.74, were restored to the owners, and these were 93 per cent. of the total number and 90 per cent. of the total value received.

The number of letters containing receipts, paid notes, &c., restored to owner was 28,135, or 87 per cent. of the total received; the number containing photographs was 25,835, or 83 per cent. of the total received; and the number containing postage-stamps was 92,228, or 95 per cent. of the total received.

The number of parcels of third and fourth class matter restored to owner during the year was 39,443, or 42 per cent. of the total received.

The small proportion of this class of matter restored is due to the neglect of the senders to avail themselves of the right to indorse upon the cover of the parcel their name and address, so that when they reach the Dead-Letter Office, upon failure to find the addressee, there is no clue whatever to the sender.

Of the 4,164,602 sealed letters opened in the Dead-Letter Office during the year, 208,316, or 5 per cent., contained other inclosures, and were made matters of record.

The statistics afforded by the foregoing statements and by the tables hereto appended are worthy of close examination.

DEAD-LETTER OFFICE AN INDEPENDENT BUREAU.

In my last annual report I had the honor to recommend, for reasons fully set forth, the separation of the Division of Dead Letters from the jurisdiction of this office, and its erection into an independent bureau, to be known as the Dead-Letter Office, the officer in charge to be designated as Superintendent of the Dead-Letter Office, and to be directly responsible to the Postmaster-General in the performance of the duties of the office. This recommendation met with a favorable indorsement in your annual report, and provision for carrying it into effect was made by the legislative, executive, and judicial appropriation act for the current fiscal year. It was carried into final operation by your formal order issued under date of July 30, 1886. The Chief of the Division of Dead Letters was appointed to the new office of Superintendent of the Dead-Letter Office; but it is to be regretted that no provision was made by law for increasing his previous compensation of \$2,250 per annum. The proper discharge of the duties of the office will, in my opinion, abundantly justify a salary of \$3,000 per annum; and the present officer is fully equal to the demands of his position. As a matter of justice to him, not less than to the public service, I beg to respectfully submit for your consideration the propriety of recommending to Congress that the salary of the office be placed at an amount somewhat commensurate with its duties and responsibilities.

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I have the honor to be, very respectfully, your obedient servant,

A. D. HAZEN,

Third Assistant Postmaster-General.

Hon. WILLIAM F. VILAS,

Postmaster-General.

REPORT OF THE SUPERINTENDENT OF THE POSTAL MONEY-ORDER SYSTEM.

POST-OFFICE DEPARTMENT,
OFFICE OF SUPERINTENDENT OF MONEY-ORDER SYSTEM,
Washington, D. C., October 23, 1886.

SIR: I have the honor to submit the following report of the operations of the Postal Money-Order System of the United States for the fiscal year ended June 30, 1886, containing the information and statistics customarily exhibited from year to year, together with observations upon the influences which have affected its transactions of that period, and recommendations looking to its further improvement and extended usefulness.

Table A, in the Appendix, shows the number and amount of the domestic money-order transactions, by fiscal years, from the establishment of the system until June 30, 1886, inclusive.

NUMBER OF MONEY-ORDER OFFICES.

The total number of money-order offices on June 30, 1885, was 7,056. Upon proper recommendations and petitions setting forth the need thereof, the Money-Order System was established during the past fiscal year at 311 additional post-offices, which were required to be in readiness to transact business on July 13, 1885, and there were discontinued as unnecessary, during the same period, 10 money-order offices, so that on June 30, 1886, the number of such offices in operation was 7,357. On August 16, 1886—as soon as practicable after the adjournment of Congress—new money-order offices to the number of 513 were established, and since June 30, 1886, 7 offices have been discontinued. At the present date, therefore, the total number of authorized money-order offices is 7,863.

ISSUES AND PAYMENTS OF DOMESTIC MONEY-ORDERS.

The number of domestic money-orders issued during the year was	
7,940,302, aggregating in amount	\$113,819,521 21
And the number of such orders paid during the same	
period was 7,877,313, of the value of	\$113,071,989 48
In addition to which money-orders were repaid to	
the number of 58,847, amounting to	813,473 56

Making the total amount of payments and repayments	113,885,463 04
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And the excess of payments and repayments over issues	65,941 83
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The gross amount of the fees received by postmasters from the public for the issue of domestic money-orders was	921,777 03
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The increase in the number of orders issued is therefore shown to be 214,409, or 2.77 per cent.; in the number of orders paid, 219,603, or 2.87 per cent.; and in the number of orders repaid, 3,644, or 6.60 per cent.

The average amount of the money-orders issued, however, was but \$14.33, the same being 93 cents less than the average of the preceding fiscal year, during which there occurred a reduction of but 32 cents below the average of the year 1883-'84; so that notwithstanding the extended patronage of the system during the fiscal year ended June 30, 1886, the total value of the orders issued was diminished by \$4,041,400.06, or 3.43 per cent., and of the orders paid and repaid by \$4,110,742.02, or 3.48 per cent.

In the gross amount of fees received the decrease was \$2,153.82, equivalent to twenty-three one-hundredths of 1 per cent., while the average fee was 11.61 cents, or thirty-five one-hundredths of a cent less than that of the previous year.

ISSUES AND PAYMENTS OF POSTAL NOTES.

The number of postal notes issued during the year was 5,999,428, of the total value of.....	\$11,718,010 05
And the number of notes paid during the same time was 5,872,616, amounting to.....	\$11,512,726 26
While the notes repaid at the offices of issue numbered 79,584, and aggregated	154,204 47
Making the total amount of payments and repayments.....	11,666,930 73
And the excess of issues over payments.....	51,079 32
The aggregate amount of fees received from the public was	180,333 15

These figures exhibit an increase in the amount of postal notes issued of \$1,721,735.68, or 17.22 per cent.; an increase in the amount of postal notes paid of \$1,718,906.93, or 17.27 per cent.; and an increase of \$28,314.57, or 18.63 per cent., in the amount of fees received.

The increase in the number of postal notes issued was 941,141, equivalent to 18.61 per cent.; and the increase in the number of postal notes paid and repaid was 940,103, or 18.76 per cent.

The average amount of the postal notes issued was \$1.95—three cents less than the average of the previous fiscal year.

WAR CLAIMS.

The claims of colored soldiers for services rendered in the late war continue to be paid (though in smaller numbers than heretofore) through the money-order system. This office receives from the Paymaster-General of the Army such orders as he may purchase for this purpose, and transmits them, with appropriate blank forms and instructions, to the respective postmasters upon whom they are drawn, and to whom very explicit directions are given as to the identification of the claimants. Such correspondence as may afterwards be necessary for the formal settlement of claims thus paid is conducted through the money-order office. Claims to the amount of \$6,347.75 were paid by money-orders during the fiscal year just closed.

DUPLICATE MONEY-ORDERS.

Money-orders and postal notes which have remained unpaid for one year from the date of their issue are declared invalid by law, and upon proper application, accompanied by the invalid note or order, as the case may be, are replaced by duplicates issued by this office, which also restores to the owners, on application, by means of duplicates, the amounts of such money-orders as have been lost or destroyed, or have received more than one indorsement in violation of law, and also the amounts of orders issued in favor of concerns declared by the Postmaster-General, under authority of section 4041, Revised Statutes, to be "fraudulent."

The numbers of duplicate postal notes and of duplicate money-orders, respectively, drawn during the fiscal year ended June 30, 1886, as well as the various causes which necessitated the issue of the latter, are exhibited in Table B of the Appendix hereto. The total number of

duplicate money-orders issued was 18,118, and the total number of duplicate postal notes was 4,709.

DRAFTS AND TRANSFERS.

The means authorized and provided for the purpose of supplying with necessary funds those postmasters who must pay money-orders exceeding in amount those issued by them consist of transfers from the postage funds, and, when these are insufficient or unavailable, of drafts on the postmaster at New York City, and where it is found that the payments continuously or frequently exceed the receipts, a letter of credit on the latter for a convenient sum, subject to renewal from time to time as it becomes exhausted, and a supply of blank drafts are furnished to the postmaster, whose bond, if it be not already large enough, is thereupon increased in an amount sufficient to protect the Government on account of this additional trust reposed in the postmaster.

Money-order drafts to the total amount of \$14,544,037.56 were paid by the postmaster at New York during the last fiscal year.

All transfers from the postal funds are repaid by this office from money-order funds by means of approximate monthly payments or retransfers and deposits of final balances found by the Auditor to be due, and by him reported quarterly, such deposits being made with the assistant treasurer of the United States at New York to the credit of the Treasurer of the United States, for the service of the Post-Office Department.

The transfers for the four quarters of the past fiscal year, and the deposit to liquidate the indebtedness of the money-order system on account of the first quarter thereof, were as follows:

Quarter ended September 30, 1885:

From postage to money-order funds	\$177,003 36
From money-order to postage funds	139,389 91

Balance due postage funds (deposited January 19, 1886)	37,613 45
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Quarter ended December 31, 1885:

From postage to money-order funds	142,793 08
From money-order to postage funds	200,207 44

Balance due money-order funds	57,414 36
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Quarter ended March 31, 1886:

From postage to money-order funds	133,967 47
From money-order to postage funds	198,920 23

Balance due money-order funds	64,952 76
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Quarter ended June 30, 1886:

From postage to money-order funds	122,969 67
From money-order to postage funds	18,353 13

Balance due postage funds	104,616 54
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SUMMARY.

Balance due money-order funds, quarter ended December 31, 1885	\$57,414 36
Balance due money-order funds, quarter ended March 31, 1886	64,952 76

	122,367 12
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Deduct balance due postage funds, quarter ended June 30, 1886	104,616 54
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Net balance due money-order funds	17,750 58
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On account of their great distance from Washington and the delay which would ensue if drafts were transmitted to them directly from the Department, money-order offices on the Pacific slope are supplied with such funds as they may require on application to the neighboring large post-offices of San Francisco, Cal., and Portland, Oreg. During the last fiscal year, in pursuance of this arrangement, the postmaster at the former office furnished the sum of \$177,418, and the postmaster at the latter the sum of \$87,877.

REMITTANCES OF SURPLUS MONEY-ORDER FUNDS.

The aggregate amount of the remittances of surplus money-order funds made during the year ended June 30 last was \$95,831,156.85. Such remittances comprised the daily surplus of every office, and were forwarded to and through successive depositories, which are post-offices located at paying centers and need more funds than they receive from the issue of orders.

LOST REMITTANCES.

There were reported to this office during the fiscal year ended June 30, 1886, 78 cases of the alleged loss in transit, by mail or otherwise, of remittances of surplus money-order funds, 3 of which were made during the previous fiscal year, but were not brought to the notice of the Department until after June 30, 1885.

The sum of \$1,362.08, the total amount involved in 15 remittances, was recovered, and the papers in the cases of the remaining 63 remittances, aggregating in value \$4,179.92, were referred to the Assistant Attorney-General for this Department for adjudication under the provisions of the act of March 17, 1882, which empowers the Postmaster-General to allow credit for losses of this nature, incurred through no fault or negligence of the remitting postmaster. Table C in the Appendix describes in detail the 78 remittances above mentioned.

ERRONEOUS PAYMENTS OF MONEY-ORDERS.

During the last fiscal year the Department received complaints as to the alleged erroneous payment of 52 money-orders, or in the ratio of 1 to every 152,618 money-orders paid. In the Appendix will be found Table D, containing the particulars of 134 money-orders alleged to have been improperly paid, and amounting in the aggregate to \$3,272.66. Thirty-three of these cases, involving \$911.08, were unsettled at the close of the previous fiscal year, and the remaining 49 arose prior to July 1, 1885, but were not reported to the Department until after that date.

The tabular statement exhibits the disposal made of these cases as follows: \$905.98, the total amount of 38 orders, were recovered by post-office inspectors and paid to the true payees; it was ascertained upon investigation that 16 orders, of the aggregate value of \$445.16, had been paid in the first instance to the persons entitled thereto. The sum of \$619.78, the amount of 29 orders, was charged to the fault or lack of precaution of the postmasters who effected payment, and the latter were required to make good this amount. Two money-orders, amounting to \$65, were paid to claimants who established their ownership therein, and in these two cases the Post-Office Department assumed the loss, which was not chargeable to the laches of either the

postmasters, remitters, or payees concerned. The payees themselves were held blameworthy in three cases, involving \$85, which the Department declined to pay a second time; and there remained unsettled at the close of the fiscal year the cases of 46 orders, amounting together to \$1,151.74.

REVENUES AND EXPENSES.

As reported by the Auditor of the Treasury for the Post-Office Department, the receipts and expenses of the domestic money-order business for the last fiscal year were as follows:

RECEIPTS.

Amount received for fees on orders issued	\$921,777 03
Amount of gain	678 12
Amount of premiums, &c	326 82

EXPENDITURES.

Amount allowed postmasters for commissions	\$358,664 44
Amount allowed postmasters for clerk-hire	234,387 61
Incidental expenses	80,398 79
Lost remittances, burglaries, &c	4,441 35
Bad debts	11,866 19
	<u>689,758 38</u>

Excess of receipts over expenditures, being gross revenue 233,023 59

Under the head of "Incidental expenses" are embraced the cost of stationery for use in the money-order business in post-offices, of money-order stamps, and of all money-order blanks, blank-books, and printed matter supplied to postmasters and to this office, the latter amounting to \$34,298.67 for domestic money-order business, part of which, viz, the sum of \$3,407.11, was in payment for work ordered in the preceding fiscal year.

The aggregate expense on account of books and blanks for both domestic and international money-order business and postal-note business was \$37,651.86, and of this sum the amount of \$3,709.21 was for requisitions dated previous to July 1, 1885. Such part of the cost of books and blanks as pertains to international money-order business is charged against the proper systems as a legitimate expense thereof.

The receipts and expenses of the postal-note business are stated by the Auditor to be as follows:

RECEIPTS.

Amount received for fees on notes issued	\$180,333 15
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EXPENDITURES.

Amount allowed postmasters:	
For commissions	\$68,196 15
For clerk-hire	18,131 45
Incidental expenses	23,787 70
	<u>110,115 30</u>

Excess of receipts over expenditures, being gross revenue 70,217 85

By far the greater part (to wit, \$17,643.74) of the item of incidental expenses is composed of the cost of the engraved postal-note forms supplied to the Department under contract.

THE INTERNATIONAL MONEY-ORDER BUSINESS.

Money-order business with Japan, under a convention for the purpose between the two countries, began on the 1st of October, 1885. A convention for the exchange of money-orders with the Leeward Islands was duly concluded by the postal administrations of the two countries on November 28–December 17, 1885, and the business was begun thereunder on January 1, 1886. A copy of that convention will be found in the Appendix hereto. The convention with Japan was published with my last annual report.

Negotiations are now in progress for an exchange of money-orders between the United States on the one hand and the Netherlands, Norway, and Austria-Hungary, respectively, on the other. At the close of the last fiscal year there were 1,587 offices authorized to transact international money-order business, to which number 55 offices have since been added.

STATISTICS OF THE INTERNATIONAL MONEY-ORDER BUSINESS.

In the appended tabular statement appear the number and amount of the money-order transactions of this country with each of twenty foreign countries, as well as a comparison, by means of amounts and percentages, of the operations of the last with those of the previous fiscal year.

Country.	Number of orders issued.	Amount of orders issued.	Number of orders paid.	Amount of orders paid.	No. of orders repaid.	Amount of orders repaid.	Amount of fees received.
Canadian.....	51,030	\$883,233 98	93,507	\$1,241,801 39	884	\$3,725 57	\$13,091 89
British.....	226,078	2,897,721 89	42,309	656,634 70	608	6,166 02	46,963 05
German.....	165,426	2,261,320 19	50,252	1,441,640 04	634	8,016 80	34,906 80
Swiss.....	18,187	805,411 80	6,101	173,916 25	53	666 00	4,330 35
Italian.....	23,052	576,737 24	1,296	36,836 83	99	1,935 37	7,972 95
French.....	10,626	157,640 54	3,904	79,291 92	115	1,549 69	2,436 90
Jamaica.....	187	2,789 12	1,846	60,489 45	4	102 49	43 70
New Zealand.....	261	6,753 99	1,910	24,122 03	.....	.....	92 53
New South Wales.....	205	3,756 36	1,246	25,313 36	5	25 18	55 59
Victoria.....	235	5,211 79	846	15,562 79	3	54 05	72 78
Belgian.....	1,405	25,524 74	1,158	30,380 80	8	128 01	367 06
Portuguese.....	267	5,394 10	554	24,550 86	4	139 00	76 00
Swedish.....	6,069	113,473 80	1,440	40,404 74	12	278 23	1,633 20
Tasmania.....	11	307 42	115	1,491 38	.....	.....	2 95
Windward Islands.....	89	1,066 62	897	25,432 03	.....	.....	23 30
Japanese.....	112	2,300 10	239	5,253 12	.....	.....	28 30
Cape Colony.....	21	421 25	210	3,268 44	.....	.....	6 10
Hawaiian.....	151	2,601 73	2,154	34,975 04	2	5 35	37 25
Queensland.....	27	488 29	300	7,093 28	1	14 00	6 05
Leeward Islands.....	4	101 52	30	407 04	.....	.....	1 10
Total.....	403,423	7,178,750 21	209,887	3,919,532 61	1,827	24,825 76	112,396 29

The above table exhibits an increase in the number of international orders issued of 44,502, or 9.91 per cent., and in the amount of international orders issued of \$338,427.74, or 4.95 per cent.; an increase of 6,837, or 3.35 per cent., in the number of international orders paid and repaid, and a decrease of \$121,225.01, or 2.98 per cent., in the amount of international orders paid and repaid. The decrease in the amount of international fees received was \$29,030.35, equivalent to 20.53 per cent.

The fact that there is a decrease in the amount of the orders paid, while there is an increase in the number thereof, is due to the reduction of the average amount of the paid orders from \$19.95 for the fiscal year ended June 30, 1885, to \$18.72 for the last fiscal year.

The average amount of the international orders issued was \$14.55, as against \$15.24 for the previous year.

Country.	Amount of increase or decrease in orders issued as compared with 1884-'85.	Percentage of increase or decrease in issues.	Amount of increase or decrease in orders paid as compared with 1884-'85.	Percentage of increase or decrease in payments.	Amount of increase or decrease in fees received as compared with 1884-'85.	Percentage of increase or decrease in f.c.s.
Canadian	\$47,518 90	5.78	*\$34,621 31	*2.71	*\$1,587 35	*10.51
British	238,473 44	8.88	5,287 29	.81	*12,511 55	*20.34
German	*78,223 97	*2.85	*67,686 95	*5.73	*7,170 50	*17.05
Swiss	22,362 11	7.90	6,366 00	3.79	*408 85	*8.28
Italian	*9,110 23	*1.55	2,500 07	7.26	*1,427 95	*15.19
French	15,906 09	11.22	*2,943 88	*3.55	*193 90	*7.33
Jamaica	*44 95	*1.58	*551 98	*1.08	*0 15	*17.44
New Zealand	2,280 79	50.90	101 97	.80	14 95	19.20
New South Wales	*77 28	*2.03	8,943 95	64.64	*10 10	*15.46
Victoria	*509 99	*8.91	2,742 96	21.30	*25 70	*28.12
Belgian	4,563 44	21.77	1,883 52	6.61	*2 60	*.71
Portuguese	*377 07	*0.54	21,063 47	604.07	*17 53	*18.25
Tasmania	113 78	119.17	289 47	85.34	80	37.21
Cape Colony	*67 62	*17.22	1,750 86	115.37	*2 30	*27.88
Hawaiian	424 78	16.74	*90,923 24	*72.22	*6 10	*12.04
Queensland	*177 88	*26.65	1,982 65	28.79	*4 50	*28.20

* Decrease. Each amount not marked with an asterisk represents an increase.

Swedish exchange did not go into operation until April 1, 1885.

Windward Islands exchange did not go into operation until October 1, 1884.

Japanese exchange did not go into operation until October 1, 1885.

Leeward Islands exchange did not go into operation until January 1, 1886.

The increase in the total volume of international money order business (notwithstanding the decrease of payments) was \$217,202.73, or nearly 2 per cent.

REVENUE FROM INTERNATIONAL MONEY-ORDER BUSINESS.

As shown by the report of the Auditor for this Department, the accruing revenues from the various international money-order systems are as follows, to wit:

From the Canadian business	\$7,056 05
From the British business	3,850 04
From the German business	16,610 60
From the Swiss business	3,835 12
From the Italian business	12,393 72
From the French business	1,949 67
From the Jamaica business	251 46
From the New Zealand business	34 24
From the New South Wales business	151 83
From the Victoria business	78 24
From the Belgian business	352 14
From the Portuguese business	189 25
From the Tasmania business	10 02
From the Hawaiian business	62 65
From the Swedish business	169 99
From the Queensland business	56 10
From the Cape Colony business	31 85
From the Windward Islands business	192 33
From the Japanese business	47 75
	<hr/>
	47,323 05
Loss from the Leeward Islands business	12 62
	<hr/>
Total	47,310 43
53 Ab	

It appears from the Auditor's letter of October 23, 1886 (see Exhibit E of the Appendix), that the international revenue for the fiscal year ended June 30, 1885, as reported by him, was, through a clerical error of his office, \$13,446.43 in excess of the true amount.

GENERAL FINANCIAL RESULTS.

The domestic and international money-orders and the postal notes issued during the past fiscal year numbered in all 14,433,153 and amounted to \$132,716,317.47, while the payments and repayments aggregated in number 14,099,574, of the total value of \$129,496,752.14. There were received from the public fees to the amount of \$1,214,506.38.

The increased patronage of the system is represented by 1,200,053 remittances, the same being a little over 9 per cent. more than were made during the preceding year.

In accordance with the provisions of section 4050 of the Revised Statutes of the United States, the following amounts, the same being the total revenue, as reported quarterly by the Auditor, from money-order and postal-note business for the year, were deposited, on the dates mentioned below, with the assistant treasurer of the United States at New York, N. Y., to the credit of the Treasurer of the United States, for the service of the Post-Office Department, to wit:

Quarter ended—	Amount.	Deposited—
September 30, 1885.....	\$76, 441 67	January 12, 1886.
December 31, 1885	121, 527 19	April 29, 1886.
March 31, 1886.....	82, 757 86	August 23, 1886.
June 30, 1886.....	69, 825 15	October 21, 1886.
Total	350, 551 87	

To ascertain the net revenue of the money-order system, however, there must be taken into account such expenses as are each year provided for by appropriations made by Congress and are not defrayed out of the proceeds of the money-order business.

For the fiscal year ended June 30, 1886, these items may be stated as follows :

Salaries to 49 employes in the Superintendent's office.....	\$63,280 00
Salaries to the employes in the money-order division of the Auditor's Office	238,441 41
Stationery furnished for use in the Superintendent's office.....	413 91
Books, blanks, printing, and stationery furnished for use in the money-order division of the Auditor's Office	10,772 26
Salaries of employes in the money-order building, under the supervision of the superintendent of the Post-Office Department building	9,220 00
Rent of one-half of the money-order building.....	4,000 00
Estimated cost of furniture and miscellaneous expenses of same	2,000 00
Rent of building known as Marini's Hall.....	4,500 00
Watchmen, laborers, and incidental and miscellaneous expenses of same.	8,100 00
Total	341,387 58

After subtracting this amount from the gross revenue above mentioned there remains a net profit of \$9,164.29 from the money-order and postal-note business, this being the revenue in excess of all ascertainable legitimate expenses.

The expenses paid from appropriations increased in the sum of \$55,998.13, the greater part of which, viz, \$46,001.12, was on account

of increased clerical service in the Auditor's Office, over the expenditures for which this Department has no control.

REDUCTION OF FEE ON SMALL ORDERS.

Pursuant to the recommendation made in your last annual report, the fee on domestic money-orders for sums not exceeding \$5 was reduced from 8 cents to 5 cents by act of Congress approved June 29, 1886, the provisions of which, under your order made by virtue of the second section of the act, took effect on July 26, 1886. During the current fiscal year, therefore, the public will enjoy the advantage of this considerable reduction.

It is possible that the reduction in question, which makes the fee for the small money-orders but 2 cents more than that for the postal notes, may somewhat reduce the number of the latter to be sold. It is not anticipated, however, that it will materially affect the issues of the postal notes, which seem to occupy a field almost entirely new, and have not yet apparently interfered to any great degree with the money-orders.

I have also to advert to the reduction made on the 1st of January, 1886, in accordance with my recommendation, in the fees for international money-orders. To this cause is largely due the diminution in the revenue from that branch of the service from \$104,215.47, for the year 1884-'85, to \$47,310.43 for the last fiscal year, which was occasioned in part, also, by the unusually high rates for sterling exchange prevailing during a great portion of the year, such exchange being employed in very large amounts by this Department to pay its indebtedness to Great Britain, incurred by reason of the excess of the orders issued in this country on Great Britain over those drawn in that country for payment in the United States.

I earnestly hope that the bill H. R. 5878, which passed the House of Representatives July 19, 1886, may become a law at the ensuing session of Congress. Its principal object is to extend to the smaller towns and villages, where the post-office facilities are such that a general money-order business cannot be maintained, a much-needed medium of exchange by providing for the *issue* only of postal notes at such post-offices other than money-order offices as the Postmaster-General may designate. Its further provision that postal notes shall be issued payable at any money-order office, which was recommended in my last annual report, and received your commendation and approval, will extend the usefulness of these notes and facilitate their collection, besides relieving the Department of much troublesome correspondence entailed upon it by reason of the erroneous payment at one money-order office of postal notes drawn upon another.

I am convinced by experience and observation that the facilities afforded by the money-order system are not as well known as they should be in the smaller towns. The Department heretofore has made no effort to bring this system to the notice of the public further than to place in every money-order post-office a placard containing a brief announcement of the fact that money-orders might be obtained thereat. I believe that in the interest of that class of people in the smaller towns and cities who have occasion to make remittances by mail, and with the object of preventing, as far as possible, the transmission of money in letters, it would be both expedient and profitable to advertise the system in such localities by means of circulars distributed through the agency of the postmasters, whose services for this purpose could be readily enlisted, because the anticipated increase of business occasioned by the distribution of the advertisements would increase their *commissions for the clerical work of issuing and paying the orders.* The

expense of printing a sufficient supply of circulars would not, in my opinion, exceed \$2,500, and such expense could be defrayed from the proceeds of the money-order business.

I respectfully suggest, for your consideration, whether it would not be wise, in the interest of the manufacturing and laboring classes, to require money-order offices of the first and second classes to keep open for the transaction of business on Saturday night of each week between the hours of 6 and 8 o'clock. This need not impose any additional labor upon the post-office employes, because such offices could, without inconvenience to the public, be closed on Saturdays between the hours of 4 and 6 p. m., while those whose labors do not cease until 6 o'clock would be accommodated by the later hours on the day which is usually the "pay-day" of the working classes.

I am, sir, very respectfully, your obedient servant,

C. F. MACDONALD,

Superintendent of the Money-Order System.

Hon. WILLIAM F. VILAS,

Postmaster-General.

REPORT OF THE SUPERINTENDENT OF FOREIGN MAILS.

POST-OFFICE DEPARTMENT,

OFFICE OF FOREIGN MAILS,

Washington, D. C., October 1, 1886.

SIR: I have the honor to submit the report of the office of foreign mails for the fiscal year ended June 30, 1886.

The year has been characterized by a great deal of discussion relative to compensating American steamship companies for the conveyance of United States mails to foreign countries.

The American steamship companies declined to convey the mails after the first of August, 1885, for the whole amount of the sea and inland postage, upon the grounds that the postage collected was not adequate compensation for the sea conveyance of the mails, and at that rate of pay the mails would be conveyed at a loss to said companies; but Congress having failed to provide for a greater compensation, said steamship companies have all tendered their ships, and such of them as can be used to advantage for expediting the mails have been accepted.

The service to Havana, Cuba, having been transferred from this office to the Second Assistant Postmaster-General, and engrafted onto the domestic service from Tampa, Fla., via Key West, to Havana, the Department could not utilize to advantage the New York and Cuba and the New York, Havana and Mexican Steamship Companies for the conveyance of mails to Havana, and therefore declined the tender of their ships. In like manner, it having been found that much of the correspondence for the Gulf ports of Mexico, which prior to August 1, 1885, had been sent exclusively by sea from New York, would reach destination as quickly if sent overland to Vera Cruz for dispatch thence to destination, the correspondence referred to has been dispatched almost exclusively overland to Vera Cruz during the year past.

The United States and Brazil Steamship Company have declined to receive the warrants in their favor for \$6,592.24 for services rendered in conveying mails from the United States to Brazil during the last fiscal year, and have returned the same to this Department with a statement that the several amounts allowed by the Postmaster-General were not adequate compensation for service performed.

WEIGHT OF MAILS.

The following two tables show (No. 1) the actual net weights of the mails dispatched to foreign countries by sea and the proportion sent to each country, and (No. 2) the number of articles estimated to have been contained in the mails exchanged with foreign countries, as shown by an actual count of said articles made during two weeks of the year.

No. 1.—Statement showing the weights and percentage of the mails dispatched by sea to foreign countries during the fiscal year ended June 30, 1886.

Countries.	Letters and postal cards.	Per cent.	Other articles.	Per cent.
	<i>Grams.</i>		<i>Grams.</i>	
Great Britain.....	631,100,057	41.07	447,187,263	41.34
Austria.....	7,315,015	3.23	17,738,200	1.68
Belgium.....	2,129,695	.92	12,229,657	1.14
Denmark.....	3,249,321	1.44	7,804,450	.73
France.....	13,238,431	5.84	68,736,832	5.95
Germany.....	51,827,277	22.85	185,652,684	17.37
Italy.....	7,939,178	3.55	34,841,409	3.26
Netherlands.....	2,380,015	1.06	8,819,760	.84
Norway.....	6,165,410	2.77	12,858,335	1.20
Portugal.....	612,000	.30	2,061,445	.19
Russia.....	4,511,390	1.93	8,128,610	.75
Spain.....	1,737,410	.77	10,535,625	.98
Sweden.....	11,114,805	4.80	88,094,689	8.61
Switzerland.....	4,415,976	1.99	20,335,035	1.90
Turkey.....	490,810	.23	6,710,155	.67
Total.....	*210,592,500		(875,054,154)	
Cuba.....	3,003,732	1.33	27,523,980	2.56
Porto Rico (direct).....	152,580		1,217,185	
Bermuda.....	642,535		5,971,470	
Windward Islands.....	1,111,404		10,561,636	
Jamaica.....	550,345		3,441,535	
Haiti.....	275,160		3,015,778	
Bahamas.....	262,615	1.40	2,487,373	3.39
St. Thomas and Porto Rico, via Cuba.....	155,854		2,730,409	
San Domingo.....	141,705		3,797,465	
Curacao.....	64,760		892,680	
Turk's Island.....	25,64		244,772	
Saint Thomas (direct).....	9,021		150,176	
Hawaiian Islands.....	1,671,630		13,337,411	
Japan.....	1,173,860		14,691,222	
Hong Kong.....	835,682		3,418,845	
Tahiti.....	91,949		1,180,507	
Java.....	26,123		615,909	
Manila.....	49,014	1.60	280,009	3.05
Siam.....	15,764		240,509	
Singapore.....	10,811		117,800	
New Caledonia.....	4,652		93,342	
Cochin China.....	3,237		22,811	
Hong Kong, postal agent at Shanghai.....	1,353		2,307,660	
Marquesas.....	3,326		85,778	
United States of Colombia.....	1,024,046	40	15,549,294	1.44
Guatemala.....	441,046		6,200,224	
Republic of Honduras.....	261,581		2,921,098	
British Honduras.....	202,975		1,532,395	
Nicaragua.....	151,735	.59	3,190,070	1.84
Costa Rica.....	191,904		3,050,473	
Salvador.....	102,694		2,910,623	
Brazil.....	926,881		9,389,764	
Argentine Republic.....	403,705		5,800,385	
Uruguay.....	120,593		2,238,480	
Paraguay.....	2,735		50,860	
Chili.....	522,708	1.14	11,569,063	4.23
Peru.....	300,778		0,607,551	
Venezuela.....	105,110		6,628,509	
Ecuador.....	108,236		2,056,446	
Bolivia.....	4,068		142,020	
Mexico.....	403,687	.20	4,736,215	.44
Newfoundland.....	413,721		3,772,281	
St. Pierre and Miquelon.....	45,345	.20	452,075	.39
Total.....	†10,254,838		‡198,070,622	

*Or 464,356 pounds.

†Or 1,820, 816 pounds.

‡Or 35,842 pounds.

§ Or 546,767 pounds.

Total weight of mails in grams:		
Letters		228, 547, 328
Papers		1, 073, 733, 778
Total weight of mails in pounds:		
Letters		500, 198
Papers		2, 367, 888

FOREIGN-MAIL STATISTICS.

No. 2.—*Estimate of the amount of mail matter exchanged with all foreign countries (including Mexico and Canada, by rail and sea) during the fiscal year ended June 30, 1886, based upon the count of such matter exchanged during seven days of October, 1885, and seven days of April, 1886, as made at United States exchanging post-offices, in pursuance of the Postmaster-General's order of September 11, 1885.*

	Sent.	Received.	Total.	Excess of sent over received.	Excess of received over sent.	Percentage of sent.	Percentage of received.
Number of prepaid letters	86, 061, 419	28, 822, 114	64, 883, 533	7, 239, 305	.....	.57	.43
Number of unpaid and insufficiently paid letters	749, 660	1, 404, 854	2, 214, 514	.....	715, 194	.83	.67
Number of free-of-postage letters.....	191, 814	118, 879	310, 693	72, 935	.....	.62	.88
Total number of letters	87, 002, 893	30, 505, 847	67, 408, 740	6, 597, 046	.....	.55	.45
Total number of single rates	41, 913, 132	33, 227, 917	75, 141, 049	8, 685, 215	.....	.56	.44
Number of postal cards	1, 780, 967	1, 595, 855	3, 376, 822	185, 112	.....	.53	.47
Number of newspapers, other printed matter, and business papers	47, 049, 064	26, 700, 050	73, 749, 114	20, 349, 014	.....	.64	.86
Number of packets of samples of merchandise	283, 194	410, 984	703, 178	.....	136, 790	.40	.60
Number of registered articles	639, 417	855, 620	1, 495, 037	.....	216, 203	.44	.56
Number of demands for return receipts.	14, 102	30, 244	44, 346	.....	16, 142	.22	.66
Prepaid postage on letters.....	\$1, 595, 159 41	.....	.....	.....	.....	.....	.....
Prepaid postage on printed matter	\$635, 382 77	.....	.....	.....	.....	.....	.....
Registration fees paid on packets sent ..	\$63, 941 70	.....	.....	.....	.....	.....	.....
Unpaid postages on letters, printed matter, &c.....	\$30, 513 98	159, 463 36	\$189, 977 34	.....	\$128, 949 38	.16	.84

COST OF THE SERVICE.

The sums reported for payment on account of sea transportation of the United States mails, including the "open mail matter" from foreign countries, dispatched from the United States (and including also the inward mails from non-conventional countries), during the fiscal year ending June 30, 1886, amounted to \$357,443.50, as follows:

For sea conveyance of United States mails.....	\$329, 391 48
For "open mail matter" originating in foreign countries.....	21, 490 65
For railway transit across the Isthmus of Panama.....	6, 561 37

Total..... 357, 443 50

The above items of \$329,391.48 and \$21,490.65, making a total of \$350,882.13, were distributed as follows:

For transatlantic service.....	\$287, 927 22
For transpacific service.....	26, 950 71
For West Indian, Mexican, Canadian, Newfoundland, Central and South American service.....	35, 507 18
Inward mails from United States consul at Shanghai and non-conventional countries.....	497 02

Total..... 350, 882 13

Heretofore the weight of the open mail matter has been reported and accounted for as matter originating in the United States, and the estimate in last year's report of the gross postage collected on the mails originating in the United States and destined for foreign countries was based on the total weight of United States mails, including the foreign open mail matter, as no separation is made at the various United States exchange post-offices. If the open mail matter had been deducted from the weight of mails dispatched from this country, the sum estimated as received for postage on mail matter sent to foreign countries would have been materially reduced.

The following tables show the weights of the mails conveyed and the rate and amount of compensation received by each steamer or line of steamers performing the service, and by the Panama Railroad Company:

TRANSATLANTIC SERVICE.

	Pounds.		Rate of pay per kilogram.*		Amount paid.
	Letters.	Papers.	Letters.	Papers.	
			Francs. †	Centimes ‡	
North German Lloyd Line	182,285	702,456	5	50	\$110,824 35
Cunard Line, New York	118,934	518,901	5	50	73,446 84
White Star Line	67,220	281,188	5	50	41,724 15
Liverpool and Great Western Steamship Company	43,601	183,809	5	50	27,152 21
Hamburg-American Line	19,105	80,256	5	50	11,873 90
Anchor Line	15,027	64,197	5	50	9,386 86
Inman Line	14,339	61,397	5	50	8,962 19
National Line	8,553	15,590	5	50	2,254 74
Canadian Line	389	1,950	5	50	256 11
Cunard Steamship Company (limited), Boston	348	1,109	5	50	203 45
American Line §	231	1,762			421 05
Thingvalla Line	12	26	5	50	6 46
General Transatlantic Line	2,181	10,962			1,393 75
Red Star Line	37	1			18 08
Netherlands Steam Navigation Company	8	115			3 13
Total	404,300	1,930,817			287,937 26

* 2.205 pounds—1 kilogram.

† 5 francs per kilogram—about 44 cents per pound.

‡ 50 centimes per kilogram—about 4½ cents per pound.

§ American Steamship Company: Letters, \$2.25 per kilogram; papers, 10 cents per kilogram.

TRANSPACIFIC SERVICE.

Pacific Mail Line:					
Hawaii and New Caledonia	611	3,298	5	50	\$627 69
United States consul, Shanghai	146	61	(*)		84 50
Australia, New Zealand, &c	8,357	12,012	(†)		5,444 80
Occidental and Oriental Steamship Company:					
Hawaii	60	872	5	50	64 27
Japan, &c	4,042	39,872	5	50	2,507 15
San Pablo, ‡ Japan, &c	1,771	16,866	(§)		4,183 03
Oceanic Steamship Company, || Hawaii:					
New Caledonia and Australian colonies	7,824	78,036			13,534 99
Merchants' Line	3		5	50	1 45
Total	17,864	162,949			27,447 73

* 2 cents per rate.

† 6 cents and 2 cents per rate.

‡ \$1.00 per pound.

§ San Pablo is an American steamer.

|| Oceanic Steamship Company paid from October 25, 1895, for a period of three years, \$20,000 per year.

MISCELLANEOUS SERVICE.

	Pounds.		Rate of pay per pound.		Amount paid.
	Letters.	Papers.	Letters.	Papers.	
			<i>Cents.</i>	<i>Cents.</i>	
Diamond Line Hayti and Turk's Island.....	20	610	.44	.04½	\$39 79
Dominican Line: Hayti and Turk's Island.....	37	894	.44	.04½	57 22
Earnshaw & Line Cuba.....	16	91	.44	.04½	10 64
Booth Steamship Company, Brazil.....	109	1,023	1.32	.06	312 52
New York and Cuba Mail Line:					
Cuba.....	209	2,163	.44	.04½	229 49
Porto Rico.....			.16	.02	.....
Bahamas.....	603	5,479	.44	.04½	459 26
New Orleans and Central American Line: United States of Colombia and Central America.....	111	1,233	.44	.04½	194 21
New Orleans, Honduras and Guatemala Steamship Company Central America.....	101	1,233	.44	.04½	98 11
Red Cross Line:					
Brazil.....	1,004	14,434	1.32	.06	2,706 42
Argentine Republic, &c.....			.58	.52	.....
Tampa Line:					
Cuba.....	2,332	20,200	.44	.04½	2,661 06
Porto Rico and St. Thomas.....			.16	.02	.....
Central American Line, Central America.....		30	.44	.04½	1 20
Morgan Line:					
Cuba.....	1,073	10,444	.44	.04½	895 20
Porto Rico and St. Thomas.....			.16	.02	.....
Mexico.....	36	191	.44	.04½	29 18
Lizzie Henderson:					
Cuba.....	128	1,970	.44	.04½	129 24
Porto Rico and St. Thomas.....			.16	.02	.....
Forhall Cuba, United States of Colombia and Central America.....	278	5,307	.44	.04½	294 04
Williams & Rankine: Central America.....	13	234	.44	.04½	15 17
Plant Investment Company: Cuba.....	1,875	19,482	1.00	.06	4,524 46
Atlas Line, direct:					
Jamaica, &c.....	1,854	19,808	.44	.04½	1,499 31
United States of Colombia.....	1,894	28,638	.44	.04½	2,519 98
Jamaica, Costa Rica.....	46	230	.44	.04½	30 34
New York, Newfoundland and Halifax Steamship Company, Halifax.....	53	108	.44	.04½	37 57
Rover, Jamaica and United States of Colombia.....	14	403	.44	.04½	22 73
Mexican Navigation Company Mexico.....	89	523	.44	.04½	42 02
Royal Mail Line Central America.....	1,177	11,154	.44	.04½	1,403 06
Atlantic and West India Line, Windward Islands.....	798	10,877	.44	.04½	525 08
Red D Line Venezuela and Curaçao.....	192	1,436	.44	.04½	146 05
Stamford Venezuela and Curaçao.....	4	274	.44	.04½	13 20
United States and Brazil Mail Steamship Company Brazil.....	2,552	31,361	1.00	.06	6,592 34
New York and Jamaica Mail Line:					
Jamaica direct.....	599	6,897	.44	.04½	563 05
United States of Colombia.....	2,206	53,064	.44	.04½	2,328 19
British Packet agent, Panama.....	4	.....	.44	.04½	1 66
Atlas Line, British Packet agent, Panama.....	2	.....	.44	.04½	1 19
Pacific Mail Line British Packet agent, Panama.....	2	22	.05	.02	9 74
Oteri's Pioneer Line Honduras, &c.....	346	1,977	.44	.04½	194 22
Quebec Steamship Company:					
Windward Islands.....	1,488	20,708	.44	.04½	1,557 52
Hermada.....	1,421	13,231	.44	.04½	1,201 07
Clyde Line Hayti, San Domingo, &c.....	374	5,570	.44	.04½	407 42
W D Cosh: Bahamas.....	59	5	.44	.04½	26 02
J H. Coleman Bahamas.....	14	1	.44	.04½	6 31
Haytian Republic Hayti and Turk's Island.....	10	205	.44	.04½	13 28
Tobago & Line:					
Mexico.....	15	152	.44	.04½	12 30
United States of Colombia.....	25	249	.44	.04½	52 59
Pacific Mail Line United States of Colombia.....	568	9,668	.44	.04½	671 78
Precursor Mexico.....	1	28	.44	.04½	1 84
Oregon Railroad and Navigation Company, British Columbia.....	5,307	.....	*1 cent.	.....	1,004 17
Pacific Coast Steamship Company Victoria.....	1,105	3,434	*1 cent.	.....	234 10
Boston, Halifax and Prince Edward Island Steamship Company Newfoundland &c.....	437	.....	*1 cent.	.....	322 1
Yarmouth Steamship Company: Yarmouth N.S.....	484	.....	*1 cent.	.....	146 24
Alpha Yarmouth, N.S.....	33	.....	*1 cent.	.....	9 81
American Express Company: St. John, N.B.....	56	.....	*1 cent.	.....	16 92
City of Topeka, Mexico.....	9	237	.44	.04½	14 17
Sardonyx, Mexico.....	3	315	.44	.04½	6 77
Maria P.: Central America.....	65	724	.44	.04½	80 13
Total.....	32,415	329,089			20,507 12

*For letters.

PANAMA RAILROAD-COMPANY.

For the Isthmus transit of United States mails for the west coast of Mexico and Central and South America during the fiscal year ended June 30, 1886, \$6,561.37.

The amount estimated to have been received from foreign countries for the sea transportation beyond the United States of foreign closed mails during the calendar year 1885 is \$23,853.98, and as this amount is distributed pro rata among the steamship companies interested, the total amount earned by the steamship companies in conveying mails from the United States to foreign countries during the period under consideration was \$381,051.86.

The steamship companies employed for the sea conveyance of United States mails for foreign countries having presented claim for compensation for carriage of foreign closed mails from April 1, 1879, and it conclusively appearing from the books and papers of this Department, and the report of the Auditor of the Treasury for this Department, that the payments heretofore made did not embrace this service, that the same remained wholly unpaid, and that upon the basis of the international biennial statistics this Department had received from foreign countries compensation for such carriage, agreements were entered into with the several steamship companies to accept said statistics as a basis between themselves and the United States for a full and final settlement for the services rendered by said steamship companies, and have been allowed the sums set opposite their names in the following table, the total sum so far allowed being \$52,642.58.

FOREIGN CLOSED-MAIL SERVICE.

North German Lloyd Line:

April 1, 1879, to June 30, 1883	\$634 42
Fiscal year ended June 30, 1884	1,265 11
July 1 to December 31, 1884	632 55

Canard Line, New York:

April 1, 1879, to June 30, 1883	17,982 00
Fiscal year ended June 30, 1884	7,740 70
July 1 to December 31, 1884	3,870 35

White Star Line:

April 1, 1879, to June 30, 1883	5,795 89
Fiscal year ended June 30, 1884	2,364 76
July 1 to December 31, 1884	1,182 38

Inman Line:

April 1, 1879, to June 30, 1883	4,391 11
Fiscal year ended June 30, 1884	1,505 11
July 1 to December 31, 1884	752 56

Liverpool and Great Western Steamship Company:

April 1, 1879, to June 30, 1883	2,466 98
Fiscal year ended June 30, 1884	239 54
July 1 to December 31, 1884	119 77

Hamburg-American Packet Company:

April 1, 1879, to June 30, 1883	716 26
Fiscal year ended June 30, 1884	364 22
July 1 to December 31, 1884	182 11

Plant Investment Company:

January 14, 1886	11 00
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Morgan Line:

November 1, 1885, to January 18, 1886	120 43
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Occidental and Oriental Steamship Company:

April 1, 1879, to June 30, 1883	218 26
Fiscal year ended June 30, 1884	47 02
July 1 to December 31, 1884	23 51

Quebec Steamship Company :	
January 1, 1881, to June 30, 1883.....	\$6 67
July 1 to December 31, 1884.....	3 25
Fiscal year ended June 30, 1884	6 52
<hr/>	
Total transatlantic, miscellaneous, and transpacific.....	52,642 52

The Panama Railroad Company also made claim that it had conveyed certain United States mails from Aspinwall to Panama for which it had received no compensation from this Department. An examination of the matter showed that United States mails for the west coast of Mexico, Salvador, Republic of Honduras, Guatemala, Nicaragua, and Costa Rica had been conveyed by said company, as claimed by it, from the date of the entrance to the Postal Union of each of those countries respectively, for which no payments had been made by this Department; that the aggregate net weights of the mails so conveyed from April 1, 1879, to June 30, 1885, amounted to 2,066,705 grams of letters and post cards, and 35,172,467-grams of other articles, and that at the rates fixed by the Universal Postal Union Convention for the transportation of mails by rail across the Isthmus of Panama, viz, 2 francs 50 centimes per kilogram of letters and post cards, and 92 centimes per kilogram of other articles, there was due said company the sum of \$7,232.62; and this sum was accordingly allowed and ordered paid.

There has, therefore, been allowed during the last fiscal year, over and above the expenses properly chargeable for the transportation of the mails for foreign countries during that period, the sum of \$59,875.20, as follows :

For the transportation of foreign closed mails.....	\$52,642 52
For the Isthmus transit	7,232 62

The expenditures (chargeable to the foreign mail service) on account of the United States postal agencies at Shanghai, China, and Aspinwall (Colon) and Panama, Republic of Colombia, for office rent, clerk-hire, portorage of mails, and other miscellaneous items, amounted during the first three quarters of the year (the last quarter not yet having been reported) to \$1,354.11 for the Shanghai agency, \$225 for the Aspinwall (Colon) agency, and \$840 (for the entire year) for the Panama agency; in all, \$2,419.11. From this amount it is proper, however, to deduct the sum of \$302 collected as box rents by the Shanghai agent during the first three quarters of the year, and debited him in his accounts with the Department, and \$334.07 for United States postage-stamps sold by him during the same period, leaving the net cost of the Shanghai and Colon agencies for the first three quarters of the year \$943.04.

The amounts estimated as necessary to be appropriated for the foreign mail service for the fiscal year ending June 30, 1888, are as follows :

For the transportation of mails, including foreign closed and open mails, and the railway transit across the Isthmus of Panama, calculated on the basis of paying the full sea and inland postage for the conveyance of United States mails transported by vessels of United States register.....	\$465,000
For balances due foreign countries, including the United States portion of the expenses of the International Bureau of the Universal Postal Union and the subscription of the Department to the monthly journal (L'Union Postale) of that Bureau.....	100,000
<hr/>	
Total	565,000

I estimate \$465,000 as necessary for the transportation of the mails, for the following reasons, viz :

The average annual increase in the weight of the mails conveyed during the past four years was 6½ per cent.

The weight of the mails carried in the year ending June 30, 1886, to ports to which American vessels do not ply was 210,592,500 grams of letters and post cards, and 875,654,154 grams of other articles; estimated increase as stated, at $6\frac{1}{2}$ per cent. on letters and post cards and other articles for the fiscal year ended June 30, 1887, will be 224,281,012 grams letters and post cards, and 932,571,670 grams of other articles; estimated increase on the above amount, at $6\frac{1}{2}$ per cent., will be for the fiscal year ending June 30, 1888, 238,869,277 grams of letters and post cards, and 993,188,819 grams of other articles.

The cost of conveying the above amount of mail, at 5 francs per kilogram for letters and 50 centimes per kilogram of printed matter, will make the total cost for the service \$230,503.05 for letters and post cards, and \$95,842.52 for other articles, the total being \$326,351.57.

The weight of mails conveyed during the fiscal year ended June 30, 1886, to ports to which American vessels carry mails, actual and estimated, was:

	Grams.
Letters	18,612,239
Printed matter.....	192,458,598

At the estimated increase of $6\frac{1}{2}$ per cent. on letters and printed matter, the weights for the fiscal year ending June 30, 1887, will give:

	Grams.
Letters	19,822,032
Printed matter.....	205,268,400

The estimated increase on the above amount, at $6\frac{1}{2}$ per cent. for the fiscal year ending June 30, 1888, will give:

	Grams.
Letters	20,090,472
Printed matter.....	218,610,846

The cost of conveying the above amount of mail at the sea and inland postage (\$1.60 a pound for letters, and 8 cents a pound for printed matter) will make the total cost of the service:

For letters.....	\$66,968 25
For printed matter.....	43,722 17
Total.....	110,690 42

Add the two amounts, viz, that for conveyance of mails to ports to which American vessels do not ply, \$326,351.57, and that for the conveyance of mails to ports to which they ply, \$110,690.42; contingencies, \$2,958.01; total, \$440,000.

To this amount must be added the amount necessary for the transportation of the foreign closed mails, viz, \$25,000, and the aggregate cost of the conveyance of mails to foreign countries will be \$465,000.

The item of \$25,000 for the transportation of the foreign closed mails will not, however, be a charge against this Department, as it will be recovered from the foreign countries in which said mails originated, upon the settlement of the transit accounts between this Department and those countries.

* * * * *

TRANSIT CHARGES AND POSTAGE RATES.

Article 1 of the Universal Postal Union Convention of June 1, 1873, declares that "the countries between which the present convention is concluded, as well as those which may join it hereafter, form, under the title of Universal Postal Union, a single postal territory for the reciprocal exchange of correspondence between their post-offices."

It may be well to explain in this connection that the exchange of correspondence between foreign countries is effected through the medium of certain post-offices of each of the countries, which are designated by mutual agreement of the countries interested, and which alone are authorized to receive and dispatch the correspondence, and are known as "offices of exchange." The exchanges between any two countries may be effected by means of "closed mails," or the correspondence originating in any country may be forwarded in "open mail" to any other country as an intermediary, to be forwarded by the latter country to destination.

If sent in "open mail" the matter, on its receipt in the intermediary country, is treated, so far as its forwarding is concerned, precisely as if it originated in that country, and is forwarded with matter for the same destination mailed in the intermediary country, and in fact becomes a part of the mails of that country, which country pays for its conveyance beyond, but recovers from the country of origin the estimated cost of its transit by means of statistics taken for that purpose every three years, in accordance with the provisions of article 4 of the Universal Postal Union Convention.

If "closed mails" are exchanged between any two countries, the correspondence from one country for the other is inclosed in sacks or packages made up under seal in the country of origin, addressed to the different exchange offices of the country of destination, and forwarded either direct or, when necessary, to an intervening country, which must act as an intermediary, and forward said closed mails intact, without breaking the seals or inspecting the contents of the packages, to destination by the most expeditious route. The expense of this transit being recovered in the same manner as in the case of open-mail matter.

When a closed mail received by an intermediary country requires to be transported across the territory of the intermediary country and then forwarded by sea to destination (as for instance closed mails from Europe or Cuba, received at New York, sent by rail to Tampa, and thence by sea to Havana), the intermediary country is entitled to receive from the country of origin of such closed mails pay for the *territorial* as well as for the *sea* transit; but if closed mails are dispatched by the intermediary country from the same port at which they are received, the intermediary country is entitled to recover only pay for their sea transit, as fixed by article 4 of the Universal Postal Union Convention.

Closed mails from one country to another which do not pass through an intermediary country are known as "direct mails," even though they pass through other post-offices in transit between origin and destination, as for example, mails made up at San Francisco for London, which pass through the United States post-office at New York, and the British post-office at Queenstown or Southampton, *en route* to London.

In such cases these mails are transported at the cost of the country of origin only to the first post-office of the country of destination which they reach, their transportation from that post-office to the post-office to which they are addressed being at the cost of the country of destination.

Hence this Department defrays the expense of transporting from New York to destination all mails made up in Europe addressed to the exchange offices of Boston, Philadelphia, Baltimore, Chicago, Saint Louis, or San Francisco, which are conveyed by steamers arriving at New York; Great Britain bears the expense of conveying from Queenstown or Southampton to destination all mails from the United States arriving at those ports addressed to the British post-offices of London,

Liverpool, Manchester, Dublin, Glasgow, or others; and Brazil could, if it were deemed advisable to raise the question, be required to pay for the transportation from Para of all mails from the United States delivered at that port for other Brazilian ports beyond Para.

It was felt that the primary object of the Universal Postal Union Convention—the formation of a single universal postal territory—would never be fully accomplished as long as the present rates of transit are maintained, viz, for *territorial* conveyance, 2 francs per kilogram of letters and post-cards and 25 centimes per kilogram of other articles; for *maritime* conveyance, 15 francs per kilogram of letters and post-cards and 1 franc per kilogram of other articles.

Propositions were, therefore, submitted to the postal congress of Lisbon tending to reduce to a minimum, or abolish entirely, the territorial transit charges, and to considerably modify the maritime transit charges. The principal countries in favor of entirely abolishing all territorial transit charges were the Argentine Republic, Japan, Hawaii, Turkey, Spain, Portugal, Greece, Germany, Austria, Sweden, Norway, Denmark.

At the deliberations on this question in the committee of the Postal Congress to which this subject had been assigned, Portugal led the discussion, and strongly insisted on the entire suppression of all territorial transit charges, stating that it had taken the first step in this direction by concluding a convention with Spain by which the two countries grant to each other freedom of transit; and that this matter should not be considered from a purely financial point of view, as those countries which would consent to make this sacrifice would soon find ample compensation in the increase of their postal traffic.

The principal opponents of the freedom of territorial transit and the reduction of the maritime transit were Great Britain, France, Italy, Belgium, and British India.

When the vote was taken in the committee, eighteen members voted in favor of maintaining the present transit rates, and three were against it. This vote was confirmed in the full session of the Congress.

The only transit charges which should be maintained are those which are caused by the extraordinary services involving special expenses, mentioned in article 4 of the Postal Union Convention, and in article 3 of the Postal Union Regulations, as amended, viz:

(1) "Those which are maintained for the accelerated territorial conveyance of the mail called Indian," London to Bombay, via France, Italy, and Egypt, a distance of about 5,000 miles, the time of transit being eighteen days, special fast trains being employed to convey the mails from Calais, France, to Brindisi, Italy, and from Alexandria to Suez, Egypt.

(2) "That which the postal administration of the United States maintains upon its territory for the conveyance of closed mails between the Atlantic Ocean and the Pacific Ocean," New York to San Francisco, time occupied in transit five days fourteen hours and ten minutes, a distance of 3,350 miles, a service which may well be termed a model of regularity, promptness, and safety.

(3) "That which is established for the conveyance of mails by railroad between Colon and Panama," in the Republic of Colombia, a distance of 47 miles; the reason for this short service, involving special expenses, being the fact that the Panama Railroad is in the hands of a private corporation, the Government of the Republic of Colombia having no control over it whatever."

The idea of freedom of territorial transit is not a new one, as it is

virtually granted in the postal convention between the United States and Mexico of December 11, 1861, and June 20, 1862.

It is to be hoped that the ideas so ably set forth at the Lisbon Congress by the Portuguese delegates will ultimately prevail, and that the next postal congress will bring about this much-desired result, viz, absolute freedom of territorial and maritime transit rates. Not until this is accomplished, and all transit accounts between the various administrations of the Union are done away with, will the first article of the Postal Union Convention become true, viz, that the Universal Postal Union forms a "single postal territory."

Such a step could not fail to exercise an influence on the postage rates by abolishing or reducing all surtaxes which more or less are caused by the present transit rates.

In virtue of the seventh clause of article 5 of the revised Convention of the Universal Postal Union, there may be levied, in addition to the usual Postal-Union rates (5 cents per half ounce of letters and 1 cent per 2 ounces of other articles), an additional charge for every article subject to the sea-transit rates of 15 francs (\$3) per kilogram of letters and post cards and 1 franc (20 cents) per kilogram of other articles; said additional charge not to exceed 5 cents per half ounce for letters, 1 cent for each post card, and 1 cent per 2 ounces or fraction of 2 ounces for other articles.

Quite a number of the administrations of the Union at present make use of this privilege. Great Britain, for instance, charges 5 cents postage per half ounce of letters to all the countries of Europe, Canada, and the United States, but 8 cents per half ounce of letters to all the countries and colonies of America, and 10 cents for letters to India, Siam, Japan, &c., via Brindisi. Whilst, therefore, it only costs 5 cents to send a half-ounce letter from New York to Bombay, a distance of about 8,000 miles, it costs double the amount (10 cents) to send a letter of the same weight from London to Bombay, a distance of about only 5,000 miles. There is consequently no uniformity of international postage rates, which should form one of the essential characteristics of a "single postal territory." Nor is there at present any uniformity of domestic postage rates, as will be seen from the following statement showing the domestic postage rates for letters in the principal countries of the Universal Postal Union:

Great Britain charges for a letter not exceeding 1 ounce 1 penny, equal to 2 cents.
 France charges for a letter not exceeding $\frac{1}{2}$ ounce 15 centimes, equal to 3 cents.
 Germany charges for a letter not exceeding $\frac{1}{2}$ ounce 10 pfennig, equal to 2 cents.
 Russia charges for a letter not exceeding 1 ounce 7 kopecks, equal to 5 cents.
 Austria charges for a letter not exceeding $\frac{1}{2}$ ounce 5 kreutzers, equal to 2 cents.
 Italy charges for a letter not exceeding $\frac{1}{2}$ ounce 20 centesimi, equal to 4 cents.
 United States charges for a letter not exceeding 1 ounce 2 cents.

THE UNIVERSAL POSTAL UNION DURING 1886.

During the fiscal year ended June 30, 1886, the following countries whose prospective adherence to the Universal Postal Union was mentioned in my last report have actually entered the same. The Independent State of Congo on the 1st of January, 1886, and the Republic of Bolivia on the 1st of April, 1886.

It was hoped that the British colonies in Australia, viz, Victoria, New South Wales, Queensland, South Australia, West Australia, New Zealand, and Tasmania, and the British colony of the Cape of Good Hope would enter the Postal Union at an early date, special provision for their adhesion having been made by the Lisbon Postal Congress; but unfortunately these hopes have not been realized, and there is no im-

mediate prospect of seeing the benefits of the Union extended to these important colonies.

A number of new provisions were added to the Universal Postal Union Convention of Paris by the additional act of Lisbon of March 21, 1885.

Among the more important are the following:

Article 5 bis of the Convention provides that—

The sender of an article of correspondence may cause it to be withdrawn from the service, or cause the address to be changed, as long as this article has not been delivered to the addressee.

The following countries have declared that this provision applies in their service: Argentine Republic, Austria, Belgium, Bulgaria, Chili, Costa Rica, Denmark, Danish Antilles, Egypt, France, French colonies, Germany, Greece, Guatemala, Hungary, Italy, Luxemburg, Netherlands Antilles, Netherlands East Indies, Netherlands Guiana, Norway, Paraguay, Peru, Portugal, Portuguese colonies, Roumania, Russia, Salvador, Siam, Sweden, Switzerland, Turkey, and Uruguay.

The following countries and colonies have declared that they cannot allow senders to withdraw correspondence or have the address changed: Canada, Republic of Colombia, Great Britain, all of the British colonies, Hayti, India, Japan, Mexico, Nicaragua, and Venezuela.

Article 9 bis of the Convention provides that—

Articles of correspondence of every kind are, at the request of the senders, delivered at the residences of the addressees by a special carrier immediately after their arrival in countries of the Union which consent to undertake this service in their reciprocal relations.

The following countries have, up to date, declared that they will undertake this special-delivery service: Argentine Republic (as regards correspondence for Buenos Ayres, Rosario, and La Plata), Austria, Belgium, Chili, Denmark (exclusive of Iceland and the Faroe Islands), Germany, Hungary, Japan, Luxemburg, Netherlands, Paraguay (as regards correspondence for Asuncion), Salvador (as regards correspondence for the city of San Salvador), Servia, Siam, and Switzerland.

The third paragraph of article 11 of the Postal Convention of Paris, as amended by the additional act of Lisbon, prohibits to send by mail "gold or silver bullion, precious stones, jewelry, or other precious articles, *but only in case the legislation of the countries concerned prohibits their being placed in the mails, or their being forwarded.*"

Whilst the original provision absolutely prohibited the transmission of these articles, the additional clause virtually allowed their transmission on certain conditions, that is to say, unless specially prohibited by the legislation of the countries concerned. Most of the administrations of the Union were, therefore, not slow in declaring through the intermediary of the International Bureau that their legislation contained the prohibitory clause alluded to. The following countries and colonies prohibit the transmission in the mails of gold or silver bullion, precious stones, jewelry, and other precious articles: Argentine Republic, Austria, Belgium, Bulgaria, Canada, Chili, Republic of Colombia, Costa Rica, Denmark, Danish Antilles, Egypt, France, French colonies, Germany, Greece, Guatemala, Hayti, Hawaii, Hungary, India, Italy, Japan, Mexico, Netherlands, Netherlands Antilles, Netherlands East Indies, Netherlands Guiana, Nicaragua, Norway, Paraguay, Persia, Prue, Portugal, Roumania, Russia, San Domingo, Salvador, Siam, Sweden, Switzerland, Trinidad, Turkey, Uruguay, and Venezuela.

Gold and silver coins, however, may be sent in the mails to Belgium (in insured or registered letters), Hawaii, Netherlands East Indies, and Siam.

RECOMMENDATIONS.

The time occupied by different steamers in the voyage from this country to Great Britain varies from six and a half to ten and a half days, and as the celerity of the service should enter largely into the consideration of the compensation to be allowed for the conveyance of mails to transatlantic ports, I recommend that the allowance of 5 francs per kilogram of letters and post-cards for the sea conveyance of mails to Great Britain be limited to those steamers making the trip in eight days, and that steamers requiring a greater length of time for the trip be compensated at the rate of 3 francs per kilogram of the letters and post-cards conveyed, the rate of 50 centimes per kilogram of articles other than letters and post-cards to be allowed to all vessels conveying mails without regard to the time occupied in their trips.

The foundering off Fire Island in March last of the steamer Oregon, with nearly six hundred sacks of mail from Great Britain on board, brought to notice the fact that there is no provision of law under which any expense can be incurred by this Department in the recovery of mails dispatched from the United States for foreign countries in case of disaster to the conveying steamer. I recommend that Congress be asked to authorize the expenditure of such sums as may be necessary to defray the expense of the recovery of mails for foreign countries dispatched from the United States in steamers which are wrecked in transit.

I renew the recommendation made in my last report, that Congress be asked to re-enact the law requiring all vessels of United States register, as a condition of their clearance, to receive and convey all United States mails tendered to them, upon such terms as are now or may be hereafter allowed by Congress for such service.

Several Governments of the world by statute compel vessels to convey mails tendered to them. In 1837 Great Britain enacted a law compelling the master of any British vessel bound to certain of her colonies to receive and safely convey and deliver to the postmaster at the port of destination all mails tendered by the postmaster-general of Great Britain, failure to receive mails so tendered subjecting the master of the vessel to a fine of £200 (about \$1,000); and in 1840 this statute was extended to include the masters of all vessels bound from Great Britain to foreign ports.

In 1837, only seven years after the first railroad was opened in England, a statute was enacted compelling all railroads to receive and convey all mails tendered to them by the postmaster-general of Great Britain at any hour of the day or night, and upon such schedules as he might direct.

The provisions of the British statutes above referred to are still in force, and are contained in 1st Victoria, cap. 33, section 6; 3d and 4th Victoria, cap. 96, section 37; and 1st and 2d Victoria, cap. 98.

NICHOLAS M. BELL,
Superintendent Foreign Mails.

HON. WILLIAM F. VILAS,
Postmaster-General.

REPORT OF THE AUDITOR OF THE TREASURY FOR THE
POST-OFFICE DEPARTMENT.

OFFICE OF THE AUDITOR OF THE TREASURY
FOR THE POST-OFFICE DEPARTMENT,
Washington, D. C., November 9, 1886.

SIR: I have the honor to submit herewith the annual report of the receipts and expenditures of the Post-Office Department, as shown by the accounts of this office, for the fiscal year ended June 30, 1886. All expenditures on account of service of last and prior fiscal years are stated to September 30 of current year, as in former reports.

REVENUE ACCOUNT OF THE POST-OFFICE DEPARTMENT.

Service of the fiscal year 1886.

Postal revenues of the year ended June 30, 1886	\$43,948,422 95
Expenditures to September 30, 1886	50,627,553 37
Excess of expenditures over all revenues	6,679,130 42
Amounts placed with the Treasurer to the credit of the Department, being grants from the General Treasury in aid of the postal revenues under section 2 of the act approved March 3, 1855 (Statutes, vol. 24, page 92)	6,225,000 00
Excess of expenditures over all receipts	454,130 42
Amount of balances due late postmasters on accounts closed by "suspense"	\$481 77
Amount of balances due from late postmasters charged to "bad debt" and "compromise" accounts	12,656 02
Net loss by "bad debts" and "compromise"	12,174 25
Amount to be placed with the Treasurer of the United States	466,304 67

Service of the fiscal year 1885.

Amount placed with the Treasurer to the credit of the Department, being grants from the General Treasury in aid of the revenues under section 2 of the act approved July 5, 1884 (Statutes, vol. 23, page 157)	1,500,000 00
Expended from October 1, 1885, to September 30, 1886	189,149 15

Service of the fiscal year 1884.

Amount placed with the Treasurer to the credit of the Department, being grants from the General Treasury in aid of the revenues under section 2 of the act ap- proved March 3, 1883 (Statutes, vol. 22, page 455) ..	\$528,098 81
Public act 178, approved August 4, 1886 (Statutes, vol. 24, page 272)	110,274 88
Expended from October 1, 1885, to September 30, 1886	638,373 69
	178,171 61

Service of the fiscal year 1883, and prior years (claims).

Amount placed with the Treasurer under the act approved August 4, 1886. (Public 178, Statutes, vol. 24, page 272)	7,487 58
Expended on account of 1883 and prior years (claims)	8,974 59
Expended for the service of the fiscal year 1881 and prior years (claims) reappropriated, Public 112, act approved July 7, 1884	770 20

Compensation of late postmasters readjusted and allowed under act of March 3, 1883.

Amount placed with the Treasurer to the credit of the Department, being grants from the General Treasury in aid of the revenues.		
Public act 178, approved August 4, 1886		\$380,209 46
Excess of expenditures to September 30, 1885.....	\$987 08	
Expended from October 1, 1885, to September 30, 1886.	124 68	
		<hr/>
Excess of expenditures to September 30, 1886		1,111 76

GENERAL REVENUE ACCOUNT.

Postal revenues for the year ended June 30, 1886.....		\$43,948,422 96
Expenditures for the service of 1886	\$50,627,553 37	
Expenditures for the service of 1885.....	189,149 15	
Expenditures for the service of 1884.....	178,171 61	
Expenditures for the service of 1883, and prior years (claims)	8,974 59	
Expenditures for the service of 1881, and prior years (claims) reappropriated for act approved July 7, 1884	770 40	
Expenditures for salaries of postmasters readjusted under act of March 3, 1883.....	124 68	
		<hr/>
Total expenditures to September 30, 1886		51,004,743 80
		<hr/>
Excess of expenditures over revenues.....		7,056,320 85
Amount due late postmasters on accounts closed by "suspense".....	481 77	
Amount of balances due from late postmasters and charged to "bad debt" and "compromise" accounts	12,656 02	
		<hr/>
Net loss by "bad debts" and "compromise" accounts.....		12,174 25
		<hr/>
Excess of expenditures.....		7,068,495 10

Grants from the General Treasury:

Under act of March 3, 1885, for 1886.....	\$6,225,000 00	
Under act of July 5, 1884, for 1885	1,500,000 00	
Under act of March 3, 1883, for 1884.....	528,098 81	
Under act of August 4, 1886, for 1884	110,274 88	
Under act of August 4, 1886, for 1883 and prior years (claims)	7,487 58	
Under act of August 4, 1886, for readjustment of salaries of postmasters under act of March 3, 1883.....	380,209 46	
		<hr/>
Total grants		8,751,070 73

Excess of grants over expenditures.....		1,682,575 63
Less amount of grant to the General Treasury, to repay of the postal deficiency appropriation for 1883 the sum drawn in excess of actual deficiency (paid to Treasurer by warrant No. 821, Washington, dated August 11, 1886)		467,366 52
		<hr/>
Excess of grants over expenditures		1,215,209 11
The balance standing to the credit of the general revenue account September 30, 1885		2,261,796 85
		<hr/>
The balance standing to the credit of the general revenue account September 30, 1886.....		3,477,007 96

POSTMASTERS' QUARTERLY ACCOUNTS CURRENT.

The net revenues of the Department from postages, being aggregate revenues at post-offices for the fiscal year, less the compensation of postmasters and clerks and the contingent office expenses, were:

For the quarter ended September 30, 1885	\$5,858,376 57
For the quarter ended December 31, 1885.....	7,066,433 03
For the quarter ended March 31, 1886	7,113,789 85
For the quarter ended June 30, 1886.....	6,623,122 73
	<hr/>
Total	\$26,661,722 23

The number of quarterly returns of postmasters received and audited, on which the above sum was found due the United States, was—

For the quarter ended September 30, 1885	53,600
For the quarter ended December 31, 1885	54,840
For the quarter ended March 31, 1886	54,373
For the quarter ended June 30, 1886	54,175
Total	216,988

STAMPS SOLD.

The amount of stamps, stamped envelopes, and wrappers, newspaper and periodical stamps, and postal cards sold was—

For the quarter ended September 30, 1885	\$9,418,761 38
For the quarter ended December 31, 1885	10,767,770 51
For the quarter ended March 31, 1886	10,924,522 93
For the quarter ended June 30, 1886	10,336,041 06
Total	41,447,095 88

LETTER POSTAGES.

The amount of postage paid in money was..... \$60,004 80
Included in the above amount are the following sums paid by foreign countries in the adjustment of their accounts:

Kingdom of Great Britain and Ireland.....	\$24,663 12
Dominion of Canada.....	16,095 95
Republic of Honduras.....	988 92
United States of Colombia.....	1,284 20
Empire of Japan.....	2,745 36
Empire of Russia.....	6 15
Kingdom of the Netherlands.....	113 76
Kingdom of Spain.....	8,689 57
Swiss Republic.....	161 55
Postal administration of New South Wales.....	405 73
Postal administration of Bahamas.....	49 18
Postal administration of Nicaragua.....	32 88
Postal administration of St. Lucia.....	1 29
Postal administration of Hawaii.....	2,730 31
Postal administration of Victoria.....	192 23
Postal administration of Barbadoes.....	11 13
Postal administration of Antigua.....	18 18
Postal administration of Hong-Kong.....	116 29
Postal administration of Turks Island.....	19 24
Postal administration of Newfoundland.....	181 60
Postal administration of Jamaica.....	644 91
Postal administration of Costa Rica.....	122 22
	59,273 77

Balance collected by postmasters..... 731 03

The following balances were paid and charged to the appropriation for balances due foreign countries:

Service of 1886:

Empire of Germany.....	\$6,083 72
Empire of Austria	500 89
Kingdom of Sweden	1,082 60
Kingdom of Norway	313 37
Kingdom of Belgium.....	9,107 47
Kingdom of Denmark.....	8,353 05
Republic of France	4,622 28
Republic of Switzerland	14 30
Postal administration of Bulgaria.....	436 26
Postal administration of Roumania.....	218 66
Postal administration of St. Kitts	40 42
Postal administration of British Guiana	20 98
Postal administration of Barbadoes.....	159 87
International Bureau, Berne, Switzerland	973 24

Total for 1886..... **\$31,927 09**

Service of previous years:

Empire of Brazil.....	\$2,798 79	
Empire of Germany.....	6,083 72	
Argentine Republic	6 09	
Kingdom of Sweden	1,082 60	
Kingdom of Norway	313 37	
Kingdom of Belgium.....	9,107 47	
Postal administration of Trinidad.....	18 59	
Postal administration of St. Kitts	26 68	
Postal administration of Roumania.....	218 66	
Total for previous years.....		\$19,655 97
Aggregate amount paid		51,583 06

MAIL TRANSPORTATION.

The amount charged to "transportation accrued" and placed to the credit of mail contractors and others for mail transportation during the fiscal year was :

For the regular supply of mail routes.....	\$23,393,380 81
For the supply of "special" offices	45,304 29
For the supply of "mail messenger" offices	839,882 73
For the salaries of railway postal clerks	4,482,624 21
For the salaries and expenses of the superintendents of the railway mail service.....	45,046 42
Total	28,806,218 51

FOREIGN MAIL TRANSPORTATION.

New York, Great Britain, and Ireland, and countries beyond, via Great Britain.....	\$162,926 09
New York, Great Britain, and Germany, and countries beyond	122,698 25
Philadelphia, Great Britain, and Ireland.....	421 05
Boston, Great Britain, and Ireland.....	203 45
Post-office department of Canada—English mail	256 11
New York, Baltimore, Philadelphia, Boston, Key West, New Orleans, and San Francisco, West Indies, Central and South America, Mexico, &c.....	39,261 90
New York and Newfoundland	27 87
Boston and Nova Scotia.....	288 24
Eastport and New Brunswick	16 92
Upper Pacific coast, local mail	1,938 27
San Francisco, China, Japan, Farther India, Australia, and South Sea Islands	27,446 28
Expenses of Government mail agent at Panama.....	860 00
Expenses of Government mail agent at Colon.....	225 00
Expenses of Government mail agent at Shanghai (last quarter of fiscal year not reported)	1,354 11
Total foreign mail	357,923 54
Total "transportation accrued"	29,164,142 05
The amount credited to "transportation accrued" and charged to mail contractors for overcredits, being for fines and deductions, was.....	271,716 90
The amount of fines and deductions remitted was....	17,744 09
Net amount of fines and deductions.....	253,972 81
Net amount of "transportation accrued".....	28,910,169 84
The amount paid during the year was	27,676,970 25
Excess of "transportation accrued"	1,233,199 59

PACIFIC RAILROADS SERVICE.

Included in the above amount of "transportation accrued" are the following balances for the transportation of the mails over Pacific railroads which have been certified to the Register of the Treasury. The amount is not charged to the appropriation for "inland transportation railroads," and is not, therefore, included in the total of transportation paid.

Regular service, 1886:		
Union Pacific Railway Company (old U.P. R. R. line), aided.	\$386,040	59
Union Pacific Railway Company (old Kans. Pac. line), aided portion.....	68,538	41
Lines operated, leased, or controlled by U.P. R. W. Co., non-aided	279,916	10
Central Pacific Railroad Company, aided portion.....	260,616	76
Sioux City and Pacific Railroad Company, aided portion.	12,454	20
Lines operated, leased, or controlled by S. C. & P. R. R. Co., non-aided	908	90
		<u>\$1,008,474 96</u>
Use of postal cars, 1886:		
Union Pacific Railway Company (old U.P.R.R.line), aided.	59,394	48
Union Pacific Railway Company (old Kans. Pac. line), aided portion	3,371	34
Lines operated, leased, or controlled by U.P. R. W. Co., non-aided.....	2,425	49
Central Pacific Railroad Company, aided	37,863	76
Sioux City and Pacific Railroad Company, aided.....	557	03
Lines operated, leased, or controlled by S. C. & P. R. R. Co., non-aided	51	34
		<u>103,663 44</u>
Regular service, previous years:		
Union Pacific Railway Company (old U.P.R.R.line), aided.	793	90
Lines operated, leased, or controlled by U. P. R. W. Co., non-aided	3,186	71
		<u>3,980 61</u>
Total Pacific railroads service not paid.....		<u>1,116,119 01</u>

STATEMENT OF THE CONDITION OF ACCOUNTS OF LATE POSTMASTERS.

Balance due the United States, brought forward from last report, being the net result of reports for all prior years.....	\$318,551	53	
Balance due the United States on account of postmasters becoming late during the fiscal year.....	259,640	57	
			<u>\$578,192 10</u>
Amount collected during the year	100,927	90	
Amount charged to "suspense"	1,332	20	
Amount charged to "bad and compromise debts"	12,656	12	
			<u>114,916 22</u>
Balance remaining due the United States.....			463,275 83
Of which there is in suit.....	220,774	09	
Not in suit.....	242,501	79	
			<u>463,275 83</u>
Balance due late postmasters, brought forward from last report	122,546	51	
Amount becoming due during the fiscal year.....	145,879	42	
			<u>268,425 93</u>
Amount paid during the year.....	163,587	76	
Amount credited to "suspense".....	1,813	97	
			<u>165,401 73</u>
Balance remaining due late postmasters			<u>103,024 20</u>

Amount in suit June 30, 1885	\$224,519 08	
Amount submitted for suit during the fiscal year.....	23,838 64	
		\$248,357 72
Of which there was collected during the year.....	20,160 03	
Amount otherwise settled	7,423 60	
		27,583 63
Balance remaining in suit.....		220,774 09
Amount of interest and costs collected in suits against late postmasters and sureties on postal accounts.....		2,571 53

The tables accompanying this report, numbered as follows, show in detail the transactions of the fiscal year:

No. 1.—Statement exhibiting quarterly the receipts of the Post-Office Department, under their several heads, for the fiscal year ended June 30, 1886.

No. 2.—Statement exhibiting quarterly the expenditures of the Post-Office Department, under their several heads, for the fiscal year ended June 30, 1886.

No. 3.—Statement by States of the postal receipts and expenditures of the United States.

No. 4.—Statement showing the condition of the account, with each item of the appropriation for the service of the Post-Office Department, for the fiscal year ended June 30, 1886.

No. 5.—Statement in detail of miscellaneous payments made by the Post-Office Department during the fiscal year ended June 30, 1886, and charged to "Miscellaneous items, Office of the Postmaster-General."

No. 6.—Statement in detail of miscellaneous payments made by the Post-Office Department during the fiscal year ended June 30, 1886, and charged to "Miscellaneous expenses, Office of the First Assistant Postmaster-General."

No. 7.—Statement in detail of miscellaneous payments made by the Post-Office Department during the fiscal year ended June 30, 1886, and charged to "Miscellaneous items, Second Assistant Postmaster-General."

No. 8.—Statement in detail of miscellaneous payments made by the Post-Office Department during the fiscal year ended June 30, 1886, and charged to "Miscellaneous items, Office of the Third Assistant Postmaster-General."

No. 9.—Comparative statement of the receipts and expenditures of the Post-Office Department from July 1, 1836, to June 30, 1886.

No. 10.—Gross receipts, expenses, and net revenue of Presidential post-offices for the fiscal year ended June 30, 1886.

No. 11.—Statement showing the transactions of the money-order offices of the United States for the fiscal year ended June 30, 1886.

No. 12.—Statement showing the number and amount of international money orders issued, paid, and repaid, and fees collected during the fiscal year ended June 30, 1886.

No. 13.—Statement showing the receipts and disbursements of the money-order offices of the United States during the fiscal year ended June 30, 1886.

No. 14.—Statement showing the transfers to and from the money-order account during the fiscal year ended June 30, 1886.

No. 15.—Statement showing the money-order transactions with the Assistant United States Treasurer at New York, N. Y., during the fiscal year ended June 30, 1886.

No. 16.—Statement showing the revenue which accrued on money-order and postal-note transactions for the fiscal year ended June 30, 1886.

No. 17.—Recapitulation of net revenue for the fiscal year ended June 30, 1886.

No. 18.—Statement of assets and liabilities, June 30, 1886.

No. 19.—Statement showing the principal international money-order transactions during the fiscal year ended June 30, 1886.

No. 20.—Statement showing date to which postal accounts with foreign countries have been adjusted, and the balances due respectively to the United States and to foreign countries in settlements made during the fiscal ended June 30, 1886.

No. 21.—Weight of letters, newspapers, &c., sent from the United States to European countries during the fiscal year ended June 30, 1886.

No. 22.—Weight of letters, newspapers, &c., sent by sea from the United States to countries and colonies other than European, of the Universal Postal Union, during the fiscal year ended June 30, 1886.

Very respectfully,

D. McCONVILLE,
Auditor.

Hon. WILLIAM F. VILAS,
Postmaster-General.

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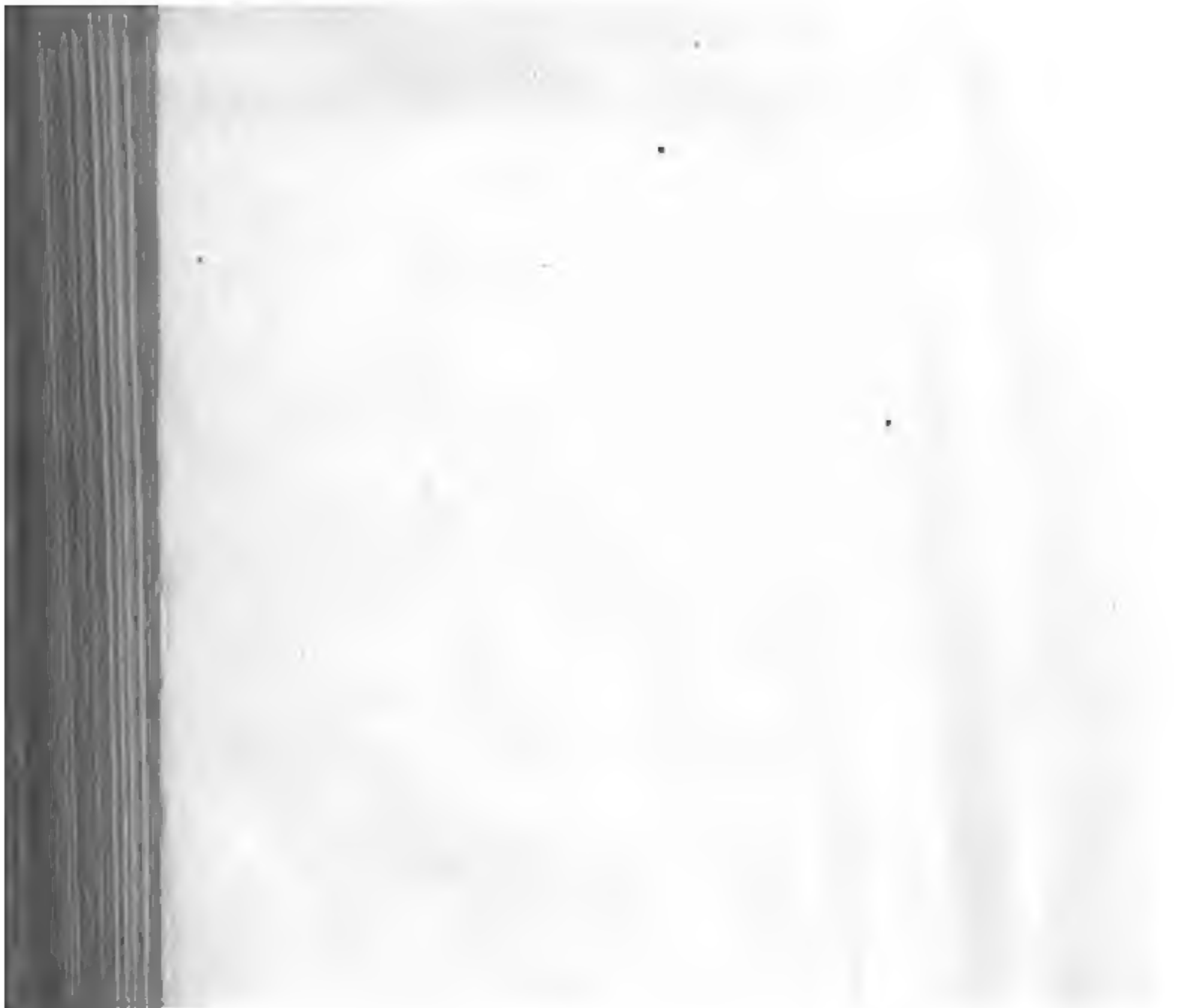
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